CSR Impact Assessment Report Cipla Limited

Report

May 2023

Table of Contents

Executive Summary
Overview of Cipla Limited
Overview of CSR Implementation Strategy and Cipla Foundation4
CSR Policy and Key Thrust Areas4
CSR Governance Mechanism5
Approach and Methodology5
Rationale of the study5
Research Framework6
Results of CSR Impact Assessment7
Palliation Projects7
Respiratory Care Support Programme16
Patient Support and Medical Assistance24
Strengthening Health Systems28
Community Health / Doorstep Health31
COVID-19 Response
Promoting Quality Education48
E-Learning55
Vocational Training
Research62
Scholarships63
Others – Disaster Relief65
Conclusion67

Executive Summary

With a prime purpose of 'Caring for Life', Cipla Limited through its's philanthropy arm, i.e., Cipla Foundation (Foundation) continues its passionate journey of social change with the power of collaborations with various implementation agencies. All the CSR Activities of Cipla Limited are undertaken by the Company either directly or through the Foundation. The Foundation collaborates with various credible institutions, NGOs, government agencies and domain experts to enhance the outreach of its CSR initiatives. Helpage India, Council of Scientific and Industrial Research - Indian Institute of Chemical Technology (CSIR – IICT), Ambuja Cement Foundation, Sankalp, Institute of Liver and Biliary Sciences (ILBS) are a few implementation partners with whom Cipla Foundation has collaborated across various geographies covering, Maharashtra, Baddi, New Delhi, Bangalore, to name a few.

As mandated by the statutory provisions, Cipla Foundation is obligated to assess the impact of its CSR projects that were completed over a year ago. For the purpose of the impact study, OECD DAC Evaluation Criteria was used for assessing the impact. The framework has defined six (6) evaluation criteria, i.e., Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability. The projects considered for the study are highlighted below¹:

S.No.	CSR Initiative	Key Impact	SDG Mapping
1	Palliation Projects	 15,000+ beneficiaries availing institutional care More than 15,000 calls received on Saath-Saath helpline 1,600+ healthcare professionals were trained across 15 hospitals and medical colleges Collaborations with 28 partners in 21 cities across India 	SDG 3 – Good Health and Well- Being
2	Respiratory Care Support Programme	 500 days of hospitalisation was avoided due to PRC 335 post-COVID patients enrolled in PRC program 	SDG 3 – Good Health and Well- Being
3	Patient support/ medical assistance	 312 children were supported for thalassemia management and chemotherapy support 	SDG 3 – Good Health and Well- Being
4	Strengthening health systems	More than 7,000 beneficiaries were benefitted	SDG 3 – Good Health and Well- Being
5	Community health/ Doorstep health	 1,516 healthcare professional trained on management of viral hepatitis 	SDG 3 – Good Health and Well- Being
6	COVID-19 response	 More than 1,15,000 free-of-cost RT-PCR COVID-19 tests were supported for patients with financial difficulties across Maharashtra 50,000+ Rapid Antigen Kits were provided 11,000+ facemasks/PPE kits/disposal gowns and gloves were provided 	SDG 3 – Good Health and Well- Being
7	Promoting Quality Education	2,500+ students benefitted from school infrastructure	SDG 4 – Quality Education
8	E-learning	5,573 tablets were distributed with pre-loaded content	SDG 4 – Quality Education
9	Vocational training	 100+ Self-Help Group beneficiaries were trained online for Project 'SAANS' 	SDG 4 – Quality Education
10	Research	 1,050 beneficiaries/individuals, contributing to nearly 480 person hours via outreach webinars and lectures 	SDG 4 – Quality Education
11	Scholarship	282 students were awarded merit awards	SDG 4 – Quality Education SDG 5 – Gender Equality
12	Others - Disaster Relief	 Nearly 795 people from 167 families came regularly to the community kitchen for meals for a period of one month 	SDG 13 – Climate Action SDG 17 – Partnerships for the goals

Overview of Cipla Limited

Cipla Limited is a global pharmaceutical company, established in 1935, focused on sustainable growth with a firm commitment to make medicines available and accessible to all. It's product portfolio includes complex generics as well as drugs in the respiratory, anti-retroviral, urology, cardiology, anti-infective, Central Nervous System (CNS), and various other key therapeutic segments. The Company has 47 manufacturing sites across the globe, producing 50+ dosage forms and 1,500+ products using cutting-edge technology platforms catering to nearly 86 markets.

Overview of CSR Implementation Strategy and Cipla Foundation

With an intent to contribute to the society, and empower vulnerable communities, Cipla envision for an equitable world built on the foundation of 'Caring for Life'. The Company recognises the importance of building long-term relationships with all its stakeholders, thereby, working together to achieve societal change and creating an impact.

Cipla's work in the community is pre-dominantly carried out through its philanthropy arm, i.e., Cipla Foundation, its Principal Implementation Agency for all the CSR activities of the Company and its subsidiaries. All CSR Activities of Cipla Limited are undertaken by the Company either directly and through Cipla Foundation. The Foundation works with credible institutions, NGOs, government agencies and domain experts to enhance the outreach of its CSR initiatives. Helpage India, Council of Scientific and Industrial Research - Indian Institute of Chemical Technology (CSIR – IICT), Ambuja Cement Foundation, Sankalp, Institute of Liver and Biliary Sciences (ILBS) are a few implementation partners with whom Cipla Foundation has collaborated across various geographies covering, Maharashtra, Baddi, New Delhi, Bangalore, to name a few.

CSR Policy and Key Thrust Areas

'Caring for Life' has been at the forefront of Cipla's business philosophy and remains the principal purpose of doing business. This philosophy is seamlessly integrated into Cipla's people, products and processes and is the foundation and underlying objective, of the Corporate Social Responsibility Policy of Cipla Limited. Cipla Limited has formulated a CSR Policy in accordance with the provisions of section 135(4)(a) of the Company's Act and CSR Rules, which is amended from time to time.

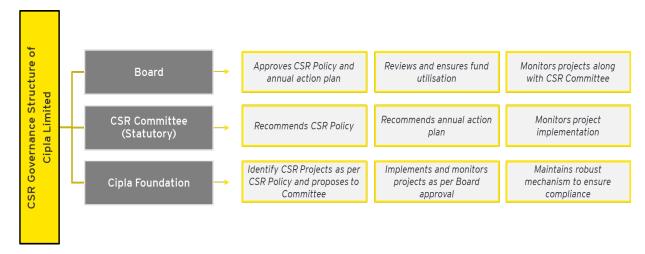
The key thrust areas that are outlined in the CSR Policy of the Company are as follows:



Weblink to the CSR Policy - https://www.cipla.com/sites/default/files/2021-03/Corporate-Social-Responsibility-Policy.pdf

CSR Governance Mechanism

The Foundation maintains the highest standards of ethics, compliance and due diligence, with robust auditing and monitoring mechanisms to govern its engagements with various implementation partners and stakeholders. The Company's CSR governance mechanism is the backbone of all its CSR implementation activities as highlighted below.



Charter of CSR Committee - <u>https://www.cipla.com/sites/default/files/2022-04/Charter-of-the-corporate-social-responsibility-committee.pdf</u>

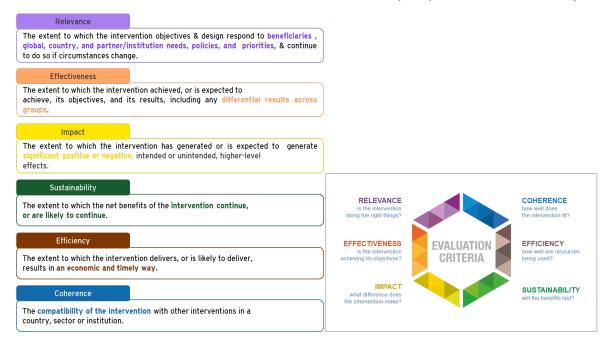
Approach and Methodology

Rationale of the study

To undertake social impact assessment of CSR initiatives being implemented by Cipla Foundation for FY 2020-21 across various key thrust areas and FY 2021-22 for Covid-19 response, in accordance with CSR Rules, wherein, minimum one year has elapsed since implementation of the projects.

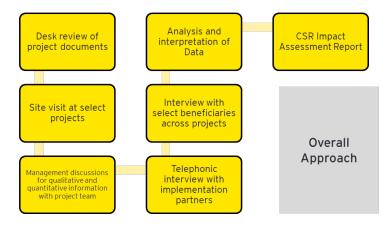
Research Framework

For assessment of the impact of CSR activities undertaken by Cipla Foundation, the OECD DAC Evaluation Criteria were used. This criterion provides a normative framework to determine the impact of any development intervention. The framework has defined six (6) evaluation criteria, i.e., Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability.



Detailed Methodology

The approach used for the CSR impact assessment study has been highlighted below.



Project wise approach to the impact assessment study:

S.No.	CSR Initiative	Desk Review	Site Visit	Management & Beneficiary Interview	Telephonic Interviews
1	Palliation projects				

2	Respiratory care support programme		
3	Patient support/ medical assistance		
4	Strengthening health systems		
5	Community health/ Doorstep health		
6	COVID-19 response		
7	Promtoing quality education		
8	E-learning		
9	Vocational training		
10	Research		
11	Scholarship		
12	Others - Disaster Relief		

Results of CSR Impact Assessment

Palliation Projects

Introduction

Chronic diseases include long-duration illnesses which are caused by a variety of factors such as genetic, physiological, environmental, behavioural, infectious, etc. Seventy-two per cent of all global diseases are caused by chronic diseases². The prevalence of chronic diseases is increasing in low and middle-income countries primarily due to socioeconomic and demographic transitions. Treatment modalities for chronic diseases include pharmacological interventions and life-style modifications. Due to advancements in the medical field, the life expectancy of patients with chronic diseases is expected to increase, however, with longer life expectancy, the prevalence of advanced illnesses, disabilities, and chronic pain is also expected to increase.

Cancer is one of the most common chronic diseases affecting human beings. It refers to a state where cells of body multiply and grow uncontrollably and it may infiltrate locally or spread to distant organs. Signs and symptoms of cancer varies and depends upon the stage of disease and organs involved. The common symptoms include pain, ulcerations, vomiting, inability to feed, etc.

Current treatment modalities include either one or combination of surgical interventions, chemotherapy, and radiotherapy. The choice of treatment depends upon a variety of factors such as the stage of disease, organs affected, patient's physiological response, etc. With the evolution of medical technology, increasing affordability and accessibility of healthcare services, and awareness among people, early diagnosis of cancer and prompt treatment are being made possible.

Curative and life-prolonging treatments have been the focus in the management of chronic illnesses. Palliative care comprising pain relief, symptom management, psycho-social support, and nutritional support are some of the unmet needs of patients and caregivers of patients with chronic diseases having advanced debilitating illnesses. due to the lack of institutional

² M. Naghavi, T. Abajobir, D. Bettcher, *et al*; Global, regional, and national age-sex specific mortality for 264 causes of death, 1980–2016: a systematic analysis for the global burden of disease study 2016

infrastructure and policy framework³. The World Health Organization (WHO) defines palliative care as an approach that improves the quality of life of patients and their families who are facing problems associated with life-threatening illnesses. It prevents and relieves suffering through the early identification, correct assessment, and treatment of pain and other problems, whether physical, psychosocial, or spiritual⁴.

The institutionalization of palliative care for cancer in India started after 1984 when the National Cancer Control Programme was modified to include pain relief as one of the basic services in cancer management. Several palliative care centres and hospice (home-based) care programmes have been commenced in the past three decades. The Palliative Care Programme of Cipla is one of the major initiatives dealing with palliative care in India.

Details of interventions

Cipla Foundation's unique interventions in palliative care aims to increase access to quality palliative care services for patients with serious illness as well as for their families including awareness and building capacity for communities and health care providers. The palliative care programme of Cipla comprises three components - Cipla Palliative Care Centre, augmenting access to palliative services through awareness and home-based support, and support to palliative and supportive care units. Activities undertaken under respective components have been summarized in the following table:

Component	Implementation Agencies	Activities
Cipla Palliative Centre	1. Cipla Cancer and Aids Foundation	In patient palliative care, Psycho-social support to patients and care givers, OPD based support at external hospitals, Home- based care
Augmenting access to palliative services through home- based support	 Dr Bhubaneshwar Borooah Cancer Institute The Jimmy S Bilimoria Foundation – Palcare Sneha (Society for Nutritional Education Health Action) Aga Khan Health Services Can Support Palliative Pain Relief Society Hyderabad Golden Butterflies 	Provision of home-based palliative care, Capacity building of volunteers, Capacity building of medical and paramedical staff, Counselling of patients and caregivers, Enhancing community awareness on palliative care
Support to palliative and supportive care units in hospitals	 9. CANKIDS KIDSCAN 10. Tata Memorial Centre 11. Bai Jerbai Wadia Hospital for Children (also home care) 12. Indore Cancer Foundation Charitable Trust 13. AIIMs Jodhpur 14. St Johns Hospital 15. King George Memorial Centre, Lucknow 	Provision of OPD-based palliative and nursing care, Providing paediatric palliative care and integrating paediatric palliative care (B J Wadia Hospital and Chhatrapati Shivaji Maharaj Hospital, Kalwa), Providing Hospital based palliative care, Training and capacity building of medical and paramedical staff, Psycho-social support to patients and care givers

³ Khosla, D., Patel, F. D., & Sharma, S. C. (2012). Palliative care in India: current progress and future needs. *Indian journal of palliative care*, *18*(3), 149–154. https://doi.org/10.4103/0973-1075.105683

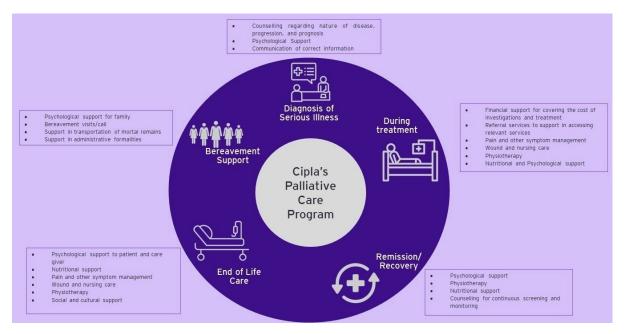
⁴ Palliative care (who.int)

Supporting in	16. Karunashraya Bangalore Hospice	
patient palliative	Trust	In-patient care , Psycho-social support to
care units	17. King George V Memorial Trust	patients and care givers

The annual spent of the above highlighted project – Palliation Projects for the reporting period was INR 10.83 crores.

Continuum of care approach

Cipla's Palliative Care Programme provides appropriate care and support throughout the lifecycle of the disease as described below:



Cipla Palliative Care Centre

Driven by the appalling gap for palliative care services in the country and inspired by its patient-centered approach to alleviate suffering, Cipla started the Palliative Care & Training Centre in Pune, in 1997, at a time when palliative care was unheard of in the country., CPC is a first-of-its-kind facility in the country that works on a FAMILY CARE MODEL – where both the patient and family member are cared for equally, as a unit. The family member stays with the patient at the Centre in residential facilities especially made for their comfort.

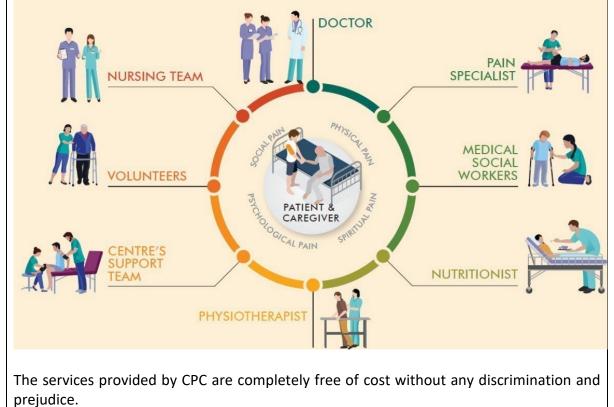
It is a 50-bedded centre designed to provide personalised care to cance patients and exudes an atmosphere of peace and serenity. It is based on concept of 'Aangan' with an open courtyard with an objective to foster a sense of community.

The guiding principles of CPC are:

• Actively engaging patients and their families in the care that they receive

- Empowering caregivers by giving them the confidence and necessary skills to care for their loved ones
- Implementing a multi- disciplinary approach with skilled professionals to deliver holistic care to patients
- Enabling patients to have access to palliative services at any point in their illness trajectory and in their preferred setting
- Building a network of general practitioners and physicians for providing emergency care patients under hospice care at home whenever needed

The CPC provides science-based and customized care based on WHO guidelines. A holistic approach has been adopted to deliver palliative care to patients as illustrated below:



Relevance of the program

As per the Global Atlas of Palliative Care, annually more than 5.6 crore people need palliative care with approximately 45% of such patients needing end-of-life care. Cancer accounts for nearly one-third of such cases and the rest of the cases are contributed by other non-communicable diseases, communicable diseases such as HIV/AIDS, injuries, poisoning, etc⁵.

The crude incidence rate of cancer in India was 95.2 per 100,000 persons in 2020⁶. In the year 2020, there were approximately twenty-seven lac active cancer patients⁷. A majority of

⁵ Global Atlas of Palliative Care, 2nd Ed 2020 (thewhpca.org)

⁶ <u>Cancer Today (iarc.fr)</u>

⁷ Cancer Statistics - India Against Cancer (cancerindia.org.in)

cancer patients are diagnosed with stage III or IV disease⁸. In addition to patients with advanced-stage disease, patients with early-stage cancer also need psycho-social and nutritional support, symptom relief, and physiotherapy.

The Lancet Commission Report (March, 2018)⁹ estimates that only 4% of the Indian population receives some form of palliative care-highlighting that 96% of Indians are deprived of pain management (for any serious health related suffering) and forced to endure the symptoms of life-limiting illnesses which continue to compromise their quality of life, till death.

Research¹⁰ has shown that early and holistic palliative care (involving timely pain relief and emotional, social, and spiritual support to patients and their families) helps in reduced emergency hospitalizations; greater adherence to treatment; reduced levels of depression amongst patients; improved communication within the families; reduced pain levels of patients and families and reporting better acceptance in their grief and bereavement

There exists a huge gap in the demand and supply of palliative care services in India. Some identified challenges in the provision of palliative care services in India are the focus on curative treatment, lack of training among healthcare professionals, lack of awareness and acceptability among patients and caregivers, and ambiguity regarding coverage under health insurance¹¹. Furthermore, due to stringent provisions under the Narcotic Drugs and Psychotropic Substances (NDPS) Act, the availability of morphine – an effective pain-alleviating drug is a major issue in symptomatic management¹².

India ranked fifty-nine in the 'Quality of Death' Index 2021, well behind developed countries¹³. This Index scores countries across four categories – 'Basic End-of-Life Healthcare Environment', 'Availability of End-of-Life Care', 'Cost of End-of-Life Care', and 'Quality of End-of-Life Care'. These statistics show the need for affordable, accessible, effective, and reliable palliative care services. Cipla's Palliative Care Programme addresses the need for institutional and home-based palliative care services.

Coherence with the National Health Policy and Programmes

National Health Policy 2017 identifies a growing need for palliative care in India. The Policy has identified the promotion of palliative healthcare as one of its core objectives. It also recognizes palliative care as one of the fundamental healthcare rights. Furthermore, the

⁸ Seamark D, Ajithakumari K, Burn G, Saraswalthi Devi P, Koshy R, Seamark C. Palliative care in India. J R Soc Med. 2000;93:292–5.

⁹ Alleviating the access abyss in palliative care and pain relief – an imperative of universal health coverage: The Lancet Commission Report, March 2018

¹⁰ Kavalieratos D, Corbelli J, Zhang D, et al. Association between palliative care and patient and caregiver outcomes: A systematic review and meta-analysis. JAMA. 2016;316(20):2104-2114. <u>doi: 10.1001/jama.2016.16840</u>; Bradley N, Lloyd-Williams M, Dowrick C. Effectiveness of palliative care interventions offering social support to people with life-limiting illness-A systematic review. *Eur J Cancer Care (Engl)*. 2018;27(3):e12837. doi:10.1111/ecc.12837

¹¹ Khosla, D., Patel, F. D., & Sharma, S. C. (2012). Palliative care in India: current progress and future needs. *Indian journal of palliative care*, *18*(3), 149–154. https://doi.org/10.4103/0973-1075.105683

¹² Joranson DE, Rajagopal MR, Gilson AM. Improving access to opioid analgesics for palliative care in India. J Pain Symptom Manage. 2002;24(2):152-9

¹³ <u>Quality of death index - Pallium India</u> | Pallium India

Policy also provides for the promotion of home-based palliative care by grass-root level healthcare workers to enhance access to it.

A report titled "Proposal of Strategies for Palliative Care in India" submitted by the expert group constituted by the Government of India recommends development of palliative care infrastructure. Subsequently the government formulated National Programme for Palliative Care (NPPC) which aims to ensure availability and accessibility of rational, quality pain relief and palliative care to the needy, as an integral part of Health Care at all levels, in alignment with the community requirements. It also provides for activities that would be initiated through National Program for prevention and control of cancer, CVD, Diabetes & Stroke.

One of the objectives of India's National Cancer Control Programme (NCCP) is to provide quality palliative care to patients with advanced disease. It also identified a need for capacity building of service providers in palliative care. It focuses on building palliative care infrastructure for augmenting accessibility to these services.

The services supported under this programme are in coherence with national priorities defined in National Health Policy 2017, NPPC, and National Cancer Control Programme.

Key Impacts of the Programme

Accessibility to Palliative Care

In times when palliative care is still evolving, an established 50-bedded centre providing institutional care provides access to quality palliative services. Outreach centres attached to oncology OPDs of the leading charitable and government hospitals help in identifying beneficiaries in an effective and targeted manner. It also enables patients in accessing offered services smoothly.

Home-based or hospice care model being implemented by Cipla Foundation and other partner organizations has enabled willing patients to access quality palliative care at home being delivered by trained professionals. Furthermore, during the COVID-19 pandemic, teleconsultation was launched to ensure continued access to palliative care services.

Number of beneficiaries availing institutional care served through Cipla Palliative	7,000+
Care Centre	
Number of beneficiaries availing institutional care served through partner organizations	15,000+
Number of unique beneficiaries under home-based care (through Cipla Foundation)	626
Number of unique beneficiaries under home-based care (through partner organizations)	4,000+
Number of patients provided with OPD services (CPC)	433

Reducing Cost Burden

Treatment of cancer involves substantial costs and due to inadequate public health infrastructure and lack of coverage under health insurance, such expenses add to out-of-pocket expenses for patients. The cost burden of the treatment of chronic diseases is one of the factors pushing people into poverty.

The services offered under Palliative Care Programme are free of cost. The cost of institutional care for similar services as provided by CPC would be approximately INR 4,000 - INR 5,000 per day of hospitalization. With an average 70% occupancy rate (*Approximately 12,775 hospital days*), CPC contributes towards savings of approximately INR 4.5 crore of out-of-pocket expenditure on palliation services.

Partnerships and Collaboration

Partnerships and collaboration are critical elements of the palliative care programme. Such partnerships would pave the way integrating palliative care into the health care system. Such partnerships help in enhancing the reach of programme, enable peer-learning, and support in scaling up the initiative. Palliative care programme has successfully created partnerships and collaborations with 28 partners in 21 cities across India.

Furthermore, such partnerships have resulted in the creation of 'Saath Saath' helpline. It is a telephonic helpline for people and their families who need palliative care. It has been introduced through a concerted effort by 11 palliative care organizations to address the inequity in access to palliative care services for patients and their caregivers.

Callers seeking assistance can get connected to palliative services telephonically at *1800-202-7777* and converse in their preferred language from Hindi, English, Kannada, Malayalam, Telugu, Assamese, and Marathi. This helpline offers an opportunity to people living with serious illnesses to find the right connections to get care that is responsive to their needs, at any point in their ailment journey.

During the reporting period, more than 15,000 calls were received from various parts of the country and appropriate support was provided.

Symptom control

One of the major objectives of palliative care is the effective relief of pain and other symptoms. The institutionalization of palliative care has improved access to scheduled medicines for managing symptoms. CPC to its best of the abilities follows the World Health Organization (WHO) analgesic ladder and the latest evidence-based techniques for symptom management.

Twelve admitted patient were interviewed, and they acknowledged substantial pain relief and the three-day pain-free period during their stay at the CPC. Relief in other symptoms such as vomiting, bowel-related symptoms, bleeding, etc., was also reported by the interviewed patients. Wound and nursing care, and physiotherapy helped patients to have a effective pain relief and enabled them to resume daily routine to extent possible.

Improvement in the Quality of Life and Death

Article 21 of the constitution of India prescribes identifies the 'right to life and liberty' as a fundamental right. Various interpretations have acknowledged the right to 'peaceful and dignified death' as an inherent right under the right to life.

End-of-life care is crucial to ensuring the peaceful and dignified death of patients with advanced disease. It also helps the family in overcoming the grief effectively. Quality of Death Index has identified objective criteria at macro level to assess the quality of palliative and end of life care. Indicators mentioned in the following table mention applicable parameters that can be extrapolated at the micro level.

Indicator	Details of CPC
Availability of specialised palliative care	• In FY 2020-21, 1,600+ healthcare professionals were
workers	trained across 15 hospitals and medical colleges
General medical knowledge of palliative	• During interactions with staff at CPC, medical and nursing
care	staff showed good understanding of palliative care
Certification for palliative care workers	No applicable certifications available
The financial burden to patients for	No financial burden on patients for the services offered
available palliative care services	
Presence of accreditation and monitoring	Standardized WHO Analgesic ladder is followed
standards for organisations	Quality indicators are being developed
Availability of opioid painkillers	Opioids pain-killers are available to the needy based on
	medical practitioner's prescription and accessible to
	patients, free of cost.
Availability of psycho-social support for	Psychosocial support is provided to patients and care
patients and families	givers
Shared decision-making	Adoption of palliative and end-of-life care is taken in
	close consultation with family and patients. Interviewed
	patients and caregivers acknowledged this fact
Patient satisfaction surveys	Currently no such surveys are being conducted, it is
	planned to develop the standardized tool and
	commence such surveys
Availability of volunteer workers	Various community volunteers comprising recovered
	cancer patients and family members contribute towards
	the provision of palliative care services

If these index is extrapolated at healthcare facility as a quality parameter, CPC's current practices would be rated high. Peer-learning, policy advocacy, and scaling-up of these services have the potential to improve India's Quality of Death Index significantly.

Psychosocial Support

Specialized medical social workers provide counselling regarding the nature of the disease, prognosis, potential outcomes, challenges, etc., to patients and caregivers. Continuous counselling support is extended throughout the treatment phase, remission phase through home care, and during grief and bereavement.

Interactions with patients and caregivers suggested relief in anxiety levels after admission to the facility. However, formal anxiety and depression assessment of patients and caregivers is not being conducted. It can provide insights into the effectiveness of psychological counselling being provided.

Several social and cultural activities are also conducted at the CPC. It helps in building a closerto-home environment at the facility. Interaction with other patients and their caregivers helps in tackling anxiety. It enables people to overcome grief as well in an effective manner. During interactions with family members, positive impact of social activities was evidenced.

Training and capacity building

Medical and paramedical staff working on palliative care services get on-job training regarding palliative care services. In absence of widely available formal courses on palliative care, such on-job training is a crucial element of capacity building on this theme. Exposure to palliative services also sensitises healthcare workers to pursue a further career in the domain.

Scalability of the Programme

Opportunities

Palliative care in India is not available widely at affordable cost. With advancement in medical technologies, increasing awareness, and improving healthcare infrastructure, diagnoses of cancer cases are expected to increase. It will increase the demand-supply gap in palliative care.

After the formal incorporation of palliative care in the National Health Policy 2017, National Programme for Palliative Care, and the National NCD Programme, there is a push from the government to build infrastructure and capacity at the grass-root level. Furthermore, the Indian Association of Palliative Care (IAPC) - a registered Public Trust and Society, works extensively on advocacy, capacity building, and peer learning. It can act as catalyst in development of palliative care services.

Cooperative collaboration with government and non-governmental organizations would bring effectiveness and efficiency through leveraging complementary competencies.

Challenges

Palliative care has challenges on both the demand and supply sides. Demand side challenges are:

- o Lack of awareness and acceptance among patients and family members
- \circ $\,$ More focus on curative and interventional palliation $\,$
- Lack of sensitization of healthcare professionals regarding palliative care
- Absence of standardized protocol for palliation

In addition to the demand side, there are several supply-side bottlenecks:

- o Lack of certified professionals trained in palliative care
- Unavailability of dedicated palliative care support

A policy-based engagement with like-minded professional on addressing demand and supply side gaps is needed. It can be achieved by leveraging professional and academic platforms, close collaboration with policy makers, and healthcare providers. Learnings from operating CPC and hospice care models can provide a significant groundwork in this aspect.

Conclusion

Cipla's palliative care programme is one of the pioneering initiatives in India providing comprehensive palliative care. Palliative support is one of the least focussed areas in the management of serious diseases, especially cancer. Management of symptoms and providing a psychologically and socially conducive environment is an important aspect of quality of life

Furthermore, this programme has created an enabling ground for developing a formal largescale palliative care programme. It has helped in developing awareness among patients, care givers, and healthcare professionals towards acceptance of palliative care.

Respiratory Care Support Programme

Introduction

Cipla Foundation through its initiatives has always worked on issues that are most relevant to societal needs and requirements. In its Respiratory Care and support programme it has focused on building Pulmonary Rehabilitation Centres (PRC) to provide free of cost pulmonary rehabilitation services for cases with chronic respiratory disease and long COVID-19. Pulmonary Rehabilitation is a non-pharmacological treatment that is widely accepted and is used to improve the physical and psychological conditions of people with chronic respiratory diseases. It has proven benefits to increase the quality of life in patients suffering from lung diseases such as COPD, asthma, pulmonary hypertension etc. The program builds endurance within patient's body through a structured interventions focused on improving physiological, psychological, and nutritional health, thereby, enabling patient to live a better life. During the Covid pandemic, the program exceptionally helped in improving the conditions of patients impacted by the long-Covid/ Post-covid symptoms by assisting them in improving the quality of life and their ability to perform regular day-to-day activities effectively.

Cipla Foundation in collaboration with Bharti Hospital has set up a Pulmonary Rehabilitation Centre (PRC) under the Department of Pulmonary Medicine in Pune. At this centre Patients are enrolled through a pre-defined procedure of referrals, consultations, and Investigations from well-qualified doctors and medical professionals. In addition to this, there are appropriate inclusion and exclusion criteria being used by the centre to identify and enrol eligible patients for the program, for example, people with unstable cardiovascular parameters such as unstable angina, cardiac arrhythmias, and uncontrolled hypertension are usually excluded from this program. Additionally, some pre and post-assessments such as symptom assessment, radiological, cardiac, biomedical investigation, etc., are done to monitor the condition of enrolled patients. A tailormade 8 to 12 week Comprehensive Pulmonary Rehabilitation Program, which comprises following:

- Physiotherapy Exercise Programme
- Nutritional Assessment and Intervention Programme
- Psychological Assessment and Intervention Programme

The annual spent of the above highlighted project for the reporting period was INR 0.32 crores.

Details of interventions

Physiotherapy Exercise Program:

Under this program, the enrolled patients are first divided into different strata based on the Risk levels which are defined based on the following assessment.

- Clinical, pulmonary, and other relevant investigations
- Presence of co-morbidities
- Performance in exercise capacity test
- Physiotherapist's assessment which includes assessment of age, occupation, physical examination, symptom assessment, physical activity status etc.

As per the strata, for every patient the program is divided into two sections, one is conducted at the centre which includes an induction session in which focus is given on patient education, teaching them the correct breathing pattern along with dyspnoea relieving techniques and breathing exercises. Additionally, a follow-up session is conducted every week to introduce more rigorous and strengthening exercises such as cycling, treadmill, spot marching, stretching, and weight cuffs to their schedule in a systematic manner. In the second section, patients perform certain sets of these exercises at their home which are tailor-made for everyone. The performance of the patients is regularly monitored, and the intensity of exercise is reviewed and adjusted every week based on RPE scores, which are calculated using a modified BORG scale.

Nutritional Assessment and Intervention Program:

People with severe respiratory diseases have symptoms such as weight loss, weakness, inflammation, etc. Therefore, it becomes of utmost importance to maintain the nutritional level in their body to help them tackle these diseases. This subprogram is designed to implement interventions in their food intake to reduce the risk of unwanted weight loss, weakness, and inflammation. The enrolled patients first go through the nutritional assessment using the Malnutrition Universal Screening Tool (MUST) which is a five-step tool to identify the nutritional state of adults, who are malnourished, at risk of malnutrition (undernutrition), or Obese. The tool uses three parameters Body Mass Index (BMI), unplanned weight loss in the past 3-6 months, and illness status of patients to give them scores and these scores are used to put patients in the above-mentioned categories. Based on the assessment, a suitable diet recommendation plan is devised which includes high calories, protein, and low carbohydrates along with adequate hydration. Additional nutritional components such as vitamins and minerals are also added based on the biochemical conditions of the patients.

Psychological assessment and Intervention Program:

This sub-programme focuses on the psychological health of the patient, its main objective is to assess symptoms of anxiety and stress using the Depression, Anxiety Stress Scale (DASS21), and then deliver a psychotherapeutic plan to improve the condition of the patient. The DASS21 tool is designed to measure negative emotional states of depression, anxiety, and stress. Each of the three scales has seven items on which the patient's performance is scored and the cumulative score is then used to define the condition of the patient from the range of normal to extremely severe. Further, based on the assessed condition of the patient, a detailed psychological intervention is prepared that contains Behavioural Therapy, Cognitive Behaviour Therapy, supportive psychotherapy, and Jacobson Progressive Muscle Relaxation Technique (JPMR) which is delivered to the patients at PRC.

Relevance of the program

The prevalence of chronic respiratory diseases is increasing worldwide, as per the 2021 report of Lung India COPD is among the leading causes of morbidity and mortality globally. It was estimated to be the sixth leading cause of death in 2019. As per the Global Burden of diseases report of 2017, India has one of the highest rates of chronic respiratory diseases in the world. India contributes 15.69% of global Chronic Respiratory Diseases, but India accounts for 30.28% of all global Chronic Respiratory Disease deaths. India has the most Chronic Obstructive Pulmonary Disease (COPD) cases in the world, with a staggering 55.23 million cases. India has the second-highest number of COPD deaths worldwide, accounting for nearly 0.85 million deaths. In the latest study conducted by Lung India, the prevalence of COPD in India was estimated at 7.4%.

Although new pharmacological treatments are being developed to assist patients suffering from COPD, a variety of non-pharmacological treatments are available and important, ranging from education, oxygen therapy, pulmonary rehabilitation, etc. These therapies for chronic respiratory diseases have received increased attention and have evolved rapidly in the last decade as an essential component of the COPD treatment. Most of these treatment options appear to benefit patients in terms of quality of life and cost-effectiveness. These therapies are becoming more popular and reliable in the treatment of respiratory diseases.

In addition to chronic respiratory diseases like COPD, COVID -19 has also impacted the respiratory system of people and caused the prolonged problems of tiredness and fatigue that interfere with their daily life. The damage that was caused in the severe cases of COVID-19 has triggered respiratory diseases in patients and has a long-term impact on their regular lives. The PRC program also helps COPD and chronic-covid patients to improve their physical and psychological health through structured intervention which aims at maintaining a nutrition balance and increasing physical and phycological strengths to improve their regular lives.

Coherence the National Health Policy

The National Health Policy of India 2017 has a special focus on the preventive, promotive, and rehabilitative aspects. It intends to upgrade the existing healthcare infrastructure to provide a comprehensive set of preventive, promotive, curative, and rehabilitative services. Furthermore, the Policy sets an objective to reduce premature mortality from cardiovascular

diseases, cancer, diabetes, or chronic respiratory diseases by 25% by 2025. The Cipla Foundation's efforts towards pulmonary rehabilitation is in alignment with the stated objectives of this Policy.

Effectiveness of the program

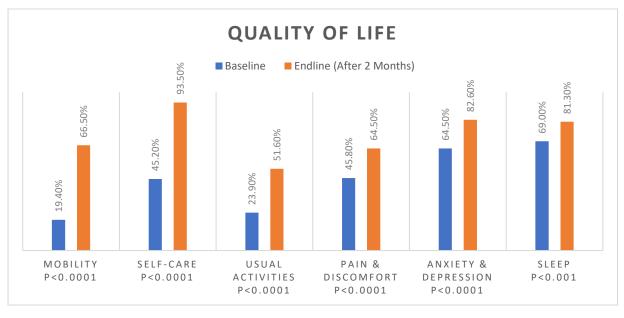
The PRC is established in Bharti hospital, Pune under the department of Pulmonary Medicine with the support of the Cipla Foundation. The centre focuses on providing well defined tailormade Pulmonary Rehabilitation services to the patients of chronic respiratory disease and chronic COVID symptoms.

During the reporting period, a total of 335 post-COVID patients with defined symptoms were sensitized and enrolled in the program. The hospital has undertaken one study to assess the benefits of the PRC. It analyzed the data of 155 beneficiaries.

Out of these 155 Patients, 34 % were female and 66% were males. The beneficiaries were from diverse educational backgrounds with 12% postgraduates, 35% graduates, 44 % higher and secondary education, and rest had no formal education. 95% of patients were diagnosed with long-COVID symptoms. The key indicators that demonstrated the effectiveness of the PRC are described in following sections:

<u>Quality of life</u>

An analysis of the pre-intervention and two months post-intervention data on mobility, selfcare, usual activities, pain & discomfort, anxiety & depression, and quality sleep provides statistically significant evidence of substantial improvements in these parameters.





Improvement in cardio-pulmonary fitness

Pre and post-intervention assessments of resting pulse rate, oxygen saturation, and distance covered during six-minute walk provided evidence of significant improvement. The mean

distance covered by the beneficiaries during six-minute walk increased by 37.6% postintervention.

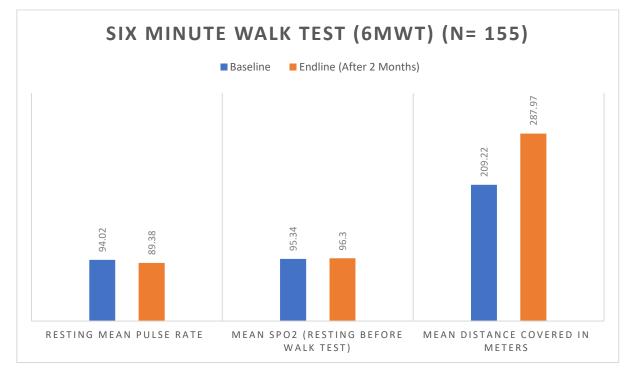


Figure 2

Effect on nutritional status

Data provides evidence of the improved nutritional status of beneficiaries. Prevalence of malnourishment and anaemia decreased from 76% to 18% and from 56.36% to zero respectively.

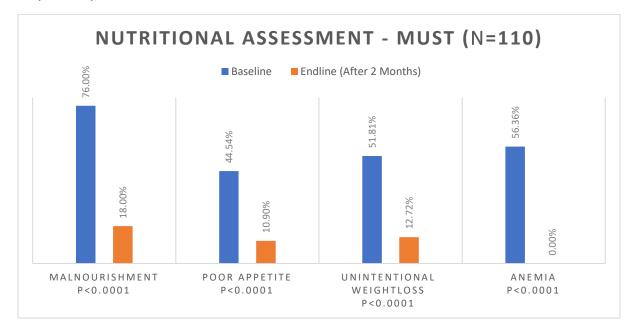


Figure 3 – Impact of PR Program on Nutritional Levels

Effect on psychological well-being

The percentage of patients without stress, anxiety, and depression increased from 29.41% to 64.70% (Figure-4), from 23.52% to 64.70% (Figure-5), and from 29.42% to 62.75% (Figure-6) respectively.

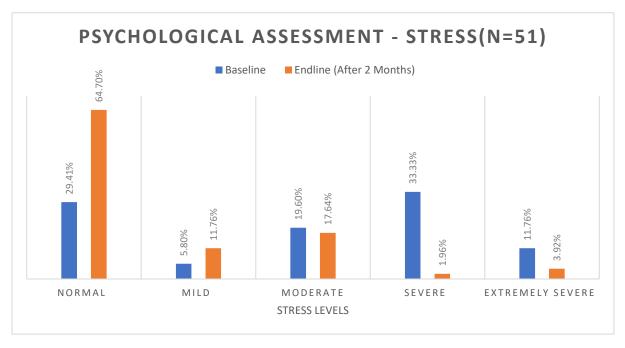


Figure 4 – Impact of PR Program on Stress Levels

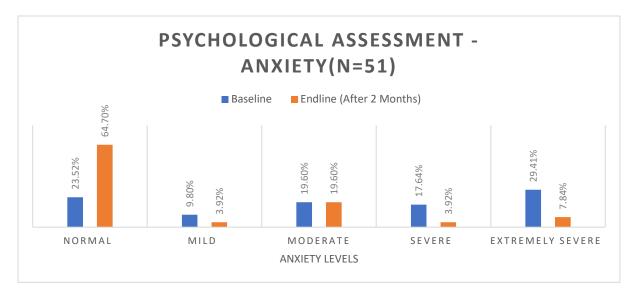


Figure 5- Impact of PR Program on Anxiety Levels

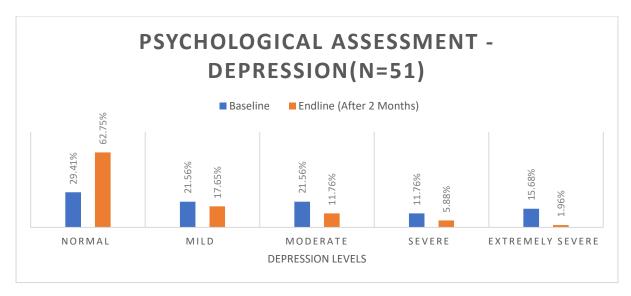


Figure 6- Impact of PR Program on Depression Levels

Key Impacts of the Programme

Accessibility and Affordability of PRC

The importance of non-pharmacological interventions in treating COPD and other severe respiratory disease are increasingly being accepted and are proven effective in providing long-term adherence to health-enhancing behaviour. The PRC set up by the Cipla Foundation has successfully sensitized patients about the benefits and need of pulmonary rehabilitation and motivated them to avail non-pharmacological interventions.

Under current healthcare service delivery systems, it is difficult to access the multidisciplinary services provided by the PRC under one roof. Cost of such interventions is approximately INR 1,000 to INR 1,500 per session, which translates into overall cost of approximately INR 25,000 to INR 30,000. It was made possible for beneficiaries to access these services in a collaborative, coherent, and consistent manner free of cost. Furthermore, integration with the pulmonary medicine department, the programme enabled easy identification and mobilization of beneficiaries.

"I used to be sleepy throughout the day. It was hampering my day-to-day life. Also, I had couple of accidents because of my sleepiness. When I consulted at Bharti Hospital, I was diagnosed with sleep apnoea. Through the PRC program, my condition has improved a lot, and now I am able to carry out my work, as usual." -Testimonial of a sleep apnoea patient

"I had severe COVID and was admitted in the ICU for over 100 days. After discharge, my daily activities were limited, due to breathlessness. After undergoing the rehabilitation program, my fitness resumed to pre-covid state and now I am able to accomplish my daily routine and work, smoothly."

-Testimonial of a post-covid patient

Avoidance of hospitalization

Studies have provided evidence of up to 35% re-hospitalization of previously hospitalized patients with COPD within 90 days after discharge¹⁴. No re-hospitalization were reported for the patients enrolled with PRC. The thirty-day readmission rate for long-COVID cases has been reported up to 4.5%15. Considering the average five-day hospitalization, the PRC intervention avoided approximately 500 days of hospitalization during the reporting period.

Sensitization of healthcare professionals toward pulmonary rehabilitation

The successful implementation of PRC has attracted the interest of healthcare professionals of Bharti Hospital in rehabilitative pulmonary care. The cross-functional team has carried out a cohort study to assess key impacts on clinical parameters. Deliberations on the results by expert professional will help in improving programmatic interventions and scaling-up.

Impact on Hospital Services

PRC programme augmented the holistic service delivered by the partner hospital by adding rehabilitative pulmonary services in addition to existing preventive and curative healthcare services. It also catalysed the institution of specialized cardio-pulmonary physiotherapy services through trained professionals.

Scalability of the Programme

The program was able to deliver the intended benefits to the patients enrolled in the program, but the programme is limited to being institutional in nature. The major challenge in scaling-up the services is low awareness of the programme and its benefits in the community and even in the medical fraternity.

Existing secondary and tertiary health care centres should be encouraged to integrate requisite services and provide holistic pulmonary rehabilitation care. Learning from the Cipla PRC and support with knowledge and SOPs would be helpful in this endeavour.

However, adherence to PRC program can be a challenge due to distance from home to hospital, and time commitment. Therefore, a community-based model would be desirable for successful scale up of the program. A parallel sensitization program can be planned for healthcare providers to increase awareness about the availability of such facilities. Additionally, to target a more diverse demography of beneficiaries more such centres should be started in collaboration with private and public hospitals.

Sustainability of the program

There is a significantly high need in society for pulmonary rehabilitation services. To extend these benefits to the larger group, the overall pulmonary rehabilitation landscape has to evolve through expansion of the network of such PRC centres, development of home-based models, and leveraging existing healthcare infrastructure. Co-funding opportunities with other corporate foundations, partnership with governmental and non-governmental

¹⁴ Roche, N., Zureik, M., Soussan, D., Neukirch, F., & Perrotin, D. (2008). Predictors of outcomes in COPD exacerbation cases presenting to the emergency department. *European Respiratory Journal*, *32*(4), 953-961.

¹⁵ Yeo, I., Baek, S., Kim, J., Elshakh, H., Voronina, A., Lou, M. S., ... & Goldbarg, S. (2021). Assessment of thirty-day readmission rate, timing, causes and predictors after hospitalization with COVID-19. *Journal of Internal Medicine*, 290(1), 157-165.

healthcare providers, and community-based mobilization are some of the possible measures to successfully scale up this programme.

Conclusion

The Project was clearly able to deliver intended benefits to the patients enrolled in the program. The Rehabilitation program was very well structured and efficiently executed by the implementation partner. PRC centre in the hospital was successful in providing access of the rehabilitation program to the patients in and around Pune at free of cost. It played a crucial role in eliminating the gaps of accessibility and availability of pulmonary rehabilitation centres in the targeted geography. However, there is a large scope to improve participation of patients and healthcare providers through sensitization of the community and healthcare professionals.

Patient Support and Medical Assistance

Introduction

'Health' is one of the key thrust areas for Cipla Foundation (CF) which emphasises on working towards a responsive health care system based on the needs of patients, families, and communities, thereby, contributing towards provision of primary healthcare support to patient through diagnosis and treatment, building awareness on health, and medical assistance.

Thalassemia is an inherited blood disorder, and its implications leads to abnormal formation of haemoglobin leading to mild or severe anaemia. Severe anaemia can cause organ damage and death in severity. Major thalassemia patients require regular blood transfusion throughout.

Cancer is a group of diseases characterized by uncontrolled cell division that leads to abnormal tissue growth. Symptoms and treatment depend on the cancer type and how advanced it is. Most treatment plans may include surgery, radiation and/or chemotherapy.

The Foundation focuses on providing comprehensive support and care for treating rare illnesses like Thalassemia including support for blood-transfusion, bone-marrow-transplants (BMT), and medicines for children from economically-weaker sections of the society.

In collaboration with King Edward Memorial (KEM) Hospital and Indian Cancer Society, the Foundation has supported with medical grant support for adults and children suffering from cancer for chemotherapy and radiotherapy, and diagnostic fund.

Furthermore, CF has undertaken various self-implemented projects to support the patients.

Details of interventions

Cipla Foundation works and collaborates with multiple specialist partners to support patients and provide medical assistance. CF is ahead in providing the partners financial assistance to help patients belonging to lower income groups.

S.No.	Implementation Partner	Key Project	Key activities
1	Arpan Thalassemia Society	 Support for providing Nucleic Acid tested (NAT test) and Leucodepleted blood to children & adult living with Major Thalassemia at Arpan Thalassemia Society 	 Registration of children with major thalassemia Provide NAT tested and Leucodepleted blood transfusion to children and adults Post blood transfusion follow up with children and adults
2	Sankalp India Foundation	• Support for Bone Marrow Transplant in Ahmedabad and Bangalore and support Thalassemia Major children on monthly basis thought Iron Chelation medicines	 Verify need and readiness for Bone Marrow Transplantation Pre-transplant injections and tests Providing drugs, disposables and diagnostic facilities for patients registered at day care centre Conduct Bone Marrow Transplantation (BMT) and support Iron chelation medicines Post transplantation follow up and monthly data submission
3	Comprehensive Thalassemia Care Centre & Bone Marrow Transplantation Centre	 Support Born Marrow Transplant to Borivali BMT Hospital 	 Supported medical grant for the transplant to the beneficiaries from the weaker- sections of the society
4	King Edward Memorial (KEM) Hospital	 Medical grant support for children suffering cancer for Radiation/Chemotherapy 	 Registration of underprivileged paediatric patient suffering with Cancer Provision of Chemotherapy or Radiotherapy Post therapy follow up Case paper documentation
5	Indian Cancer Society	Patient Support program	 Medical grant for patients suffering from cancer for the initial diagnostic fund, treatment, mid-term evaluation (diagnostic cost), and chronic disease care

The main activities as a part of the program includes:

The annual spent of the above highlighted project for the reporting period was INR 0.82 crores.

Relevance of the program

Non-communicable diseases (NCDs) are accounted for 71% and 63% of the total deaths, globally and nationally, respectively.¹⁶ Out of this, 9% of the deaths are attributed to cancer. The crude incidence rate of cancer in India was 95.2 per 100,000 persons in 2020¹⁷. In the

¹⁶ <u>Cancer Statistics Report, 2020: Report from National Cancer Registry Programme, India; go.20.00122.pdf</u>

¹⁷ <u>Cancer Today (iarc.fr)</u>

year 2020, there were approximately twenty-seven lac active cancer patients¹⁸. A majority of cancer patients are diagnosed with stage III or IV disease¹⁹. In addition to patients with advanced-stage disease, patients with early-stage cancer also need psycho-social and nutritional support, symptom relief, and physiotherapy, in addition to chemotherapy and/or radiotherapy.

Additionally, the overall management and control of thalassemia and blood related disorders are a major challenge in India wherein 67% of people reside in rural areas. The β -thalassemias are prevalent with an estimated 7,500-12,000 new births each year. Hb S (HBB: c.20A>T) and Hb E (HBB: c.79G>A) are also common regionally. Over 80 β -thalassemia (β -thal) mutations have been characterized in Indians. Numerous centers provide hematopoietic stem cell transplants (HSCTs) for thalassemias, however, only around 250 HSCTs are done annually. Though the cost of treatment is high, there is financial assistance available for a few patients. Thus, there is need of a robust policy structure and framework for treatment of thalassemia. Furthermore, for the management and prevention of thalassemia, a National Policy has been proposed to address the disparities in the quality of care. This comprehensive program will support in providing adequate care, thereby augment the existing public health care services.²⁰

The relevance of this program by Cipla Foundation and its efforts towards providing medical assistance to thalassemia and cancer patients is in alignment with the current state of management of cancer and thalassemia in the country.

Coherence of the program

The criteria for setting up the screening programme as highlighted by World Health Organisation (WHO) focuses on adequate finances for staff, equipments, and chemicals, optimal treatment of those getting affected, carrier screening, genetic counselling, pre-natal diagnosis in couples, and awareness & monitoring programmes in the nation. ²¹ In India, *Rashtriya Bal Swasthya Karyakrama* (RBSK) under National Health Mission provides for early detection and treatment of children suffering from genetic disorders including thalassaemia.

Furthermore, the Rights of Persons with Disabilities Act identifies and describes disabilities caused due to thalassemia. ²² The National Health Policy (NHP) is committed to support programmes for prevention of endemic diseases like thalassemia/anaemia. NHP also identifies to reduce premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases by 25% by 2025. As provided by the National Cancer Control Programme (NCCP), strengthening of existing cancer treatment facilities, and secondary prevention, i.e., early detection, and diagnosis of cancer is the core objective of NCCP. The efforts of Cipla Foundation are in alignment with the national policies and programmes w.r.t. prevention of cancer and thalassemia.

¹⁸ Cancer Statistics - India Against Cancer (cancerindia.org.in)

¹⁹ Seamark D, Ajithakumari K, Burn G, Saraswalthi Devi P, Koshy R, Seamark C. Palliative care in India. J R Soc Med. 2000;93:292–5.

²⁰ Thalassemia in India - PubMed (nih.gov)

²¹ <u>NHM Guidelines Cover</u>

²² A2016-49 1.pdf (legislative.gov.in)

Effectiveness of the program

Effective support to Thalassemia patients

During the reporting period, CF in collaboration with Arpan Thalassemia Society has supported in Nucleic Acid Testing (NAT) and Leucodepleted blood transfusions, utilising 1,115 blood transfusion bags. None of the patients experienced febrile transfusion reactions, and zero signs of seroconversion was observed.

In collaboration with Sankalp India Foundation, 266 children received support for labs and chelation medicine for regular management of thalassemia, and 10 children underwent a bone-marrow transplant.

Effective support to Cancer patients

During the reporting period, 46 children from financially weaker background received chemotherapy in collaboration with KEM Hospital. Furthermore, with the implementation support of Indian Cancer Foundation, CF has provided medical assistance to nearly 10 patients for cancer treatment process.

Impact of the program

Under this program, over 270 children were benefitted. Bone-marrow transplant reduces need for blood transfusion and chelation therapy, and improves quality of life. Pharmacological intervention such as chelation therapy improves quality of life, and reduces cases of iron overload and need for interventions such as splenectomy. These interventions have significant impact on life expectancy and survival rate. As per recent studies, comprehensive care of thalassemia in early childhood results in 66% mortality risk reduction²³.

Conclusion

The program for patient support and provision of medical assistance supported by CF with collaboration with the implementation partners have led to improvement in the public healthcare services, and related healthcare indices and metrics. The program was very well structured and efficiently executed by the implementation partner.

²³ Dhanya, R., Agarwal, R. K., Sedai, A., Kumari, A., Parmar, L., Hegde, S., ... & Faulkner, L. (2019). Assessment of Mortality and Its Associated Risk Factors in Patients with Transfusion Dependent Thalassemia in India. *Blood*, *134*, 973.

Strengthening Health Systems

Introduction

Cipla Foundation (CF) plays a vital role in working towards a responsive health care system bases on the needs of patients, families, and communities, thereby, contributing towards strengthening of health systems. Response, recovery, and rehabilitation support to the local communities together forms the health agenda of CF. The foundation focuses on ensuring access to healthcare by focusing on palliative care, respiratory healthcare, and other need-based medical interventions.

Cipla Foundation in collaboration with CanCare Trust has supported with financial assistance in setting of a 92 bed cancer patients in Mumbai. CanCare is involved inter alia in providing medical relief to needy patients for the diagnosis and treatment of cancer patients, and promoting education relating to cancer.

Under this key focus area, CF has also collaborated with Liver Foundation, to support the annual maintenance charges (AMC) costs of equipment of Endoscopy Department and support for medical grant of patients for endoscopic procedures at Indian Institute of Liver and Digestive Sciences, a charitable public health initiative by Liver Foundation. The project focuses on improving and generating 'access to all' by ensuring availability of accessible healthcare facilities for the people affected with liver diseases.

Furthermore, CF has undertaken various self-implemented projects to support and strengthen the health systems across various geographies.

Details of interventions

The main activities as a part of the program includes:

S.No.	Implementation Partner	Key Project	Key activities
1	CanCare Trust	 Head and Neck Cancer Hospital, Mumbai (now known as 'Head and Neck Cancer Institute of India') 	 Financial assistance to CanCare for construction and civil work
2	Liver Foundation	 Support for AMC costs of equipment of Endoscopy Department at Indian Institute of Liver and Digestive Sciences, a charitable public health initiative by Liver Foundation 	 Support annual maintenance charges for equipment purchased for endoscopy department Provision of medical grant support to 105 beneficiaries who receive treatment at Endoscopy Department (Capsule Endoscopy – 5; Upper GI Colposcopy – 105)

S.No.	Implementation Partner	Key Project	Key activities
		 Support to Public Health Centre (PHC) – Ravangaon – Installation of Sanitation Blocks 	 Installation of sanitation blocks at PHC for OPD patients
		 Support to PHC in Khalapur Taluka for Oxygen Concentrators 	 Provision of 4 Nos. of O₂ Concentrators (one per PHC) at four PHCs in Khalapur taluka
3	Cipla Foundation – Self Implemented	• Support to PHC, Kurkumbh	 Provision of O₂ concentrator, microscope, medical equipment, RO water purifier with storage and hydraulic delivery table at the PHC
		 Supporting health infrastructure and renewable energy 	 Provision and installation of solar lights Provision of outdoor gym equipment
		 Support to Sub-District Hospital, Daund for provision of Mortuary Cabinets and Solar Water Heater System 	 Installation of solar water heater system Provision of four (4) body mortuary cabinets

The annual spent of the above highlighted project for the reporting period was INR 3.80 crores.

Relevance of the program

Primary Health Centre (PHC) has been considered as a foundation of stronger and efficient health systems. The strengthening of PHC network in India boosted after the Alma Ata conference on primary health centre in 1978 and the launch of the National Health Policy in 1983. According to the Rural Health Statistics²⁴ 2020-21 report, as on 31st March, 2021, India had a total 30,579 PHCs (25,140 rural PHCs and 5,439 urban PHCs) functional in the country.

In India, making quality primary care accessible to people till the last mile has been a constant challenge. This was witnessed even more during the Covid-19 pandemic, wherein the Indian healthcare system was brutally exposed to the lack of oxygen, medicines, and infrastructure required for fighting against covid. Furthermore, the changing epidemiology of disease burden in India triggers the expansion of services offered by the health care system to include prevention, screening, and management of diseases, as a result of which, availability of

²⁴ Rural health statistics 2020-21.pdf

investigations for screening is crucial for the management of the disease burden.²⁵ CF's initiatives to strengthen the Indian healthcare system addresses the need for provision of health infrastructures, thereby, contributing to the decrease in disease burden.

Coherence of the program

The National Health Policy (NHP) of India 2017²⁶ intends to focus on building health infrastructure, and strengthening health systems, in accordance with Indian Public Health Standards (IPHS). It intends to upgrade the existing health systems by financing for additional infrastructure based on the needs of outpatient and inpatient attendance and key services in a measurable manner. Furthermore, the Policy sets an objective to strengthen health systems, by establishing primary and secondary care facility as per norms in high priority districts by 2025. The Foundation's efforts towards strengthening health systems is clearly in alignment with the NHP.

Effectiveness of the program

Financial assistance to strengthen health systems

CF supported CanCare Trust with grant assistance for the development of 'Head and Neck Cancer Institute of India' hospital. This 92-bedded hospital includes Intensive Care Units (ICUs), in-patient and out-patient wards, day care department, diagnostic facilities, operation theatres, radiotherapy, pathology, training, education and research centre.

Additionally, CF has also supported with the financial aid to Liver Foundation towards the annual maintenance of the purchased equipment of the endoscopy department, and medical grant support to 105 beneficiaries who received treatment at Endoscopy Department.

Effective support to public health centre (PHCs)

During the reporting period, CF has self-implemented and provided support to strengthen the health infrastructure at the PHCs across various geographies. The Foundation supported in providing oxygen concentrators, microscope, medical equipment, outdoor gym equipment, installation of sanitation blocks, solar lights and solar water heater system.

Infrastructure Support Provided	Beneficiary Facilities
Oxygen concentrators	Khalapur Taluka - Chowk – Borgaon, Lohop and
	Wavoshi; Kurkumbh
Microscope	Kurkumbh
Installation of sanitation blocks	PHC Ravangaon for OPD patients
Solar water heating system	Sub-District Hospital, Daund
Mortuary Cabinets	Sub-District Hospital, Daund

Impact of the program

Under the strengthening health infrastructure program, an annual maintenance of the purchased equipment's for endoscopy has resulted and further impacted in un-interrupted

²⁵ <u>Designing primary healthcare systems for future in India - PMC (nih.gov)</u>

²⁶ national health policy 2017.pdf (nhp.gov.in)

delivery of medical services, thereby, improving patient care and decrease in reactive maintenance request. More than 7,000 beneficiaries have been benefitted from the services. The services are offered at a discounted price than the corporate prices to the beneficiaries. CF's medical grant was utilised to offer services to the beneficiaries from economically-weaker background. Furthermore, the support provided to PHCs program has resulted in improving the state of PHCs, thereby, resulting in efficient delivery of services.

Conclusion

The program for health systems strengthening supported by CF with collaboration with the implementation partners have led to improvement in the public healthcare services, infrastructure, and related healthcare indices and metrics. The program was very well structured and efficiently executed by the implementation partner.

Community Health / Doorstep Health

'Health' is one of the fundamental human rights. The Constitution of India recognized the 'Right to Health' as one of the fundamental rights under Article 21. Healthcare in India is delivered through a complex system comprising public service providers, private players, and not-for-profit organizations. The public healthcare system is organized into a 3-tier system consisting of Primary Health Centres, Community Health Centres, and District Hospitals. The private sector comprises standalone dispensaries, polyclinics, and corporate hospitals. Not-for-profit organizations work either independently or in collaboration with the public healthcare system. The healthcare delivery system is skewed more towards curative and secondary and tertiary care services.

Alma-Ata Declaration, 1978 and Astana Declaration 2008 have emphasised the need for primary healthcare in ensuring Universal Health Coverage (UHC)²⁷. The definition of Health provided by the World Health Organization roots it in the community, society, and culture²⁸. Preventive and promotive healthcare services can prove to be the most cost-effective modalities in lowering the burden of diseases²⁹. Health prevention and promotion include the following activities:

- Information, Education, and Communication (IEC)
- Behavioural Change Communication (BCC)
- Reproductive Health Care (ante-natal and post-natal care and support)
- Integrated programmes for child development
- Health Education

²⁷ Declaration of Primary Healthcare, Astana, World Health Organization, Available at: https://www.who.int/primary-health/conference-phc/declaration.
²⁸ https://apps.who.int/iris/bitstream/handle/10665/329834/9789289054553-

eng.pdf?utm_source=The%20King%27s%20Fund%20newsletters%20%28main%20account%29&utm_medium=email&utm_campaign=11042446_NEWSL_HM P%202019-11-12&dm_i=21A8,6KOEM,KO3F1D,Q6IN9,1

²⁹ Weintraub, W. S., Daniels, S. R., Burke, L. E., Franklin, B. A., Goff Jr, D. C., Hayman, L. L., ... & Whitsel, L. P. (2011). Value of primordial and primary prevention for cardiovascular disease: a policy statement from the American Heart Association. *Circulation*, 124(8), 967-990.

- Water and Sanitation
- Vaccination

Various studies have established conclusive evidence that multi-pronged services targeted at health prevention and promotion can help in the uplifting health status of the community through increasing awareness, ensuring adherence to health appropriate behaviours, and inculcating health consciousness.

Details of interventions

Cipla's Community Health Initiatives have adopted strategic approaches to solve the fundamental challenges in primary healthcare delivery and to ensure the delivery of highquality preventive and promotive healthcare services. Through its community health and doorstep health program, it focuses on providing community health initiatives to promote awareness of good health, nutrition, hygiene, sanitation, small equipment support, primary health care support through diagnosis and treatment, providing infrastructure support, organizing medical camps, public system partnership for maternal, new-born, and child health and Services of Mobile Health Units. This program broadly has following key activities:

Patient Support/Medical Assistance	 Support to patients with Thalassemia and other life-limiting diseases Support in blood transfusion or bone marrow transplantation (BMT) for patient suffering from major thalassemia Support in counselling, downstaging, transplantation, and post-transplantation including patients for other similar life-limiting diseases
Strengthening Health Systems	 Provision of medical equipment and infrastructure support, such as health and wellness equipment, ambulance, and solar based equipment to healthcare institutions (Govt/District /Sub-District hospitals, Primary Health Centres (PHCs), and Community Health Centres(CHCs)) Provision of day-care unit with trained personnel and medical infrastructure equipment support to upgrade the Paediatric ICU unit
Mobile Health Unit (MHU) services	 Provision of primary healthcare services of medical consultation, free medicines, basic diagnostic, home care for bedridden, sensitization and training, preventive health awareness programs, referral services for specialty treatments, linking beneficiaries to government. program and regular health camps at non-targeted villages
Primary health care support through diagnosis and treatment, building awareness on health, hygiene, and child nutrition	 Provision of nutritious food, and engagement and play for early child development through home visits, growth monitoring, and caregiver counselling Provision of awareness sessions on covid appropriate behaviour, Non-Communicable Diseases (NCD), and health and hygiene for adolescent girls
Eliminate viral hepatitis in the remote village	 Provision of capacity building sessions for primary care physicians and paramedical professionals on management of viral hepatitis

٠	Provision of screening, testing, and vaccination of e identified
	community for viral hepatitis

The annual spent of the above highlighted project for the reporting period was INR 3.28 crores.

Relevance of the programme

According to the Rural Health Statistics³⁰ 2020-21 report, as on 31st March, 2021, India had a total 30,579 PHCs (25,140 rural PHCs and 5,439 urban PHCs) functional in the country. In India, making quality primary care accessible to people till the last mile has been a constant challenge. This was witnessed even more during the Covid-19 pandemic, wherein the Indian healthcare system was brutally exposed to the lack of oxygen, medicines, and infrastructure required for fighting against covid. Furthermore, the changing epidemiology of disease burden in India triggers the expansion of services offered by the health care system to include prevention, screening, and management of diseases, as a result of which, availability of investigations for screening is crucial for the management of the disease burden.³¹

Additionally, the management and control of thalassemia and blood related disorders are a major challenge in India wherein 67% of people reside in rural areas. The cost of treatment of blood disorders like thalassemia is high (for blood transfusion an approximate cost is INR 5,000-7,000 per sitting and for HSCT is INR 10 lakh – 15 lakh); some patients get access to financial support, however, a majority of families have to spend from their savings. Furthermore, for the management and prevention of thalassemia, a National Policy has been proposed to address the disparities in the quality of care. This comprehensive program will support in providing adequate care, thereby augment the existing public health care services.³²

With regards to viral hepatitis, a pathologic condition in which inflammation of liver is caused by viral infection, the National Health Profile of India highlights that there were more than 1.6 lac cases of viral hepatitis in the country in 2017. It accounted for more than 500 deaths. 'Early diagnosis and prompt treatment' of viral hepatitis is crucial to eliminate morbidity and mortality due to viral hepatitis. A shared care model involving primary care physicians is highly beneficial in managing hepatitis³³. These evidences make Cipla's initiatives regarding training primary care physicians and making 'testing and treating' accessible to people relevant in the Indian context.

The relevance of this program by Cipla Foundation and its efforts towards community health initiatives is in alignment with the current state and management of health in the country.

³⁰ Rural health statistics 2020-21.pdf

³¹ Designing primary healthcare systems for future in India - PMC (nih.gov)

³² Thalassemia in India - PubMed (nih.gov)

³³ Zhang, L., Liu, H., Zou, Z., Su, S., Ong, J. J., Ji, F., ... & Wong, W. C. (2023). Shared-care models are highly effective and cost-effective for managing chronic hepatitis B in China: reinterpreting the primary care and specialty divide. *The Lancet Regional Health–Western Pacific*.

Effectiveness of the program

Effective training of nurses and primary care physicians in clinical management of viral hepatitis and its complications

With this intervention, training was provided to primary care physicians and nurses on World Health Organisation Collaborating Centre – Institute of Liver and Biliary Science (WHOCC-ILBS) adapted curriculum on clinical diagnosis and management of viral hepatitis using WHO and other standard guidelines. During the reporting period, 1357 nurses and primary care physicians from ILBS were inducted for a 1-day (8 hours) training as a part of the Hepatitis Induction Program (HIP). Furthermore, a one-year Hepatitis Update Program (HUP) via online modules was conducted for ILBS. This included 12 e-learning sessions, which supported in training 60 beneficiaries.

Effective vaccination in remote village of Sitarampur

During the reporting period, a baseline survey of the prevalence of viral hepatitis, awareness of patients, and screening of Hepatitis B & C virus (HBV & HCV) was conducted, covering nearly 500 beneficiaries from Sitarampur village of Purulia district, West Bengal. A mass vaccination (completion of 3 doses within a scheduled time frame) for the eligible villagers was conducted. Furthermore, identification of infected patients (HBV & HCV) and arrangements of necessary treatments for the patients was conducted, thereby, ensuring elimination of viral hepatitis.

Effective provision of Mobile Health Unit (MHU)

In 2018, India had only 0.7 physicians, 0.5 beds, and 1.7 nurses per 1,000 population which are lower than the recommended standards by the World Health Organization³⁴. In addition to availability, the distribution of healthcare infrastructure is significantly skewed against rural and tribal areas. Cipla Foundation's Mobile Healthcare Unit initiative attempts to solve the challenge of the availability of healthcare services in difficult-to-reach areas. It is effectively aligned with the needs of the community for accessing healthcare services.

With the implementation support partner, Helpage India, CF supported set-up of two Mobile Health Units (MHU) in Patalganga, Maharashtra . Each unit comprises a medical doctor, a trained pharmacist, and stock of essential medicines. MHUs provide out-patient services at fixed day and time in 19 villages. During FY 2020-21, more than 75,000 patients were catered through MHUs.

Raising Community Health Awareness and School Health Education

Several Knowledge, Attitude, and Practice (KAP) studies conducted across states on various themes of health have provided a low level of awareness regarding health and the prevalence of myths in the community. The school curriculums also do not adequately address the subject of health education. Cipla's initiative to build community awareness and provide school health education intends to bridge the awareness gap regarding various health issues.

³⁴ https://data.worldbank.org/indicator/SH.MED.NUMW.P3?locations=IN

Thriving local health centers to raise awareness & improve the health of communities around Patalganga

- Assessment of childhood respiratory ailments
- Health Education sessions in classrooms
- 3-layer screening for respiratory ailments
- Consultation and treatment
- Behavior change interventions to build positive health habits among the communities
 - Group Health Education sessions
 - Observance of special health days
 - Screening camps
- Infrastructure and resource development of two PHCs
- Capacity building of ANMs at the subcenter level
- Develop Referral Linkages
 - Identify, map, and link the communities to the existing health infrastructure in the area
 - Familiarise the community with infrastructure and benefits

During FY 2020-21, each quarter, 360 sessions were conducted with 3,000 participants participating in a behavior change intervention program on various themes such as vectorborne diseases, diabetes, anemia, malnutrition, and tuberculosis. Training on infection prevention modules was completed in 6 sessions with 110 participants. In the referral linkage program, 2,500 directories were referred.

Strengthening the services of 10 ICDS centers at Kali Billiod and Bardari villages

- Strengthen the Anganwadi as well trained the Anganwadi key person through the training session.
- Improve the health and nutrition level of 0 to 6 years old children and ensure the physical, psychological, and social development of enrolled children.
- Improve the nutrition level of adolescent girls and pregnant and lactating mothers.
- Provide health and nutritional information and education to mothers of young children to enhance the child-rearing capabilities of mothers.
- Build the capacity of ICDS functionaries- Workers, helpers and supervisors, and ANM.
- Promote community participation in ICDS centers
- Improve basic facilities and infrastructures to provide a safe, secure, clean, and learning environment for children.
- Address the needs of adolescent girls by increasing their awareness of health and hygiene.

Activities conducted under this program were surveys, data collection, compilation and report sharing, Awareness camps, workshops, exposure visits, health camps, training programs, and support to Anganwadi centers and plantations.

Modular sanitation block installation for boys & girls at Raigad Zilla Parishad School of Nanivali

Raigad Zilla Parishad School Nanivali (1st to 5th Std.) had around 35 students (Boys 15 & Girls 20). In addition, one Anganwadi with 48 students and 3 staffs also operates from the school premises. Modular Toilet Unit was installed in the school. This modern, durable & one stop sanitation solution provides the waste management, electrical, and plumbing fittings which are user friendly.

Caring for you and your smile

Good health is very important for well-being and good hygienic practices is of prime importance to make it through a long run. Lack of awareness among the school children, inaccessibility and unaffordability for treatment are the reasons for poor oral health condition. Health and hygiene involves various aspects so providing an awareness session to the students would help the students to adopt a healthy lifestyle and hygienic practices. To improve the oral health and sanitation among the following activities were undertaken:

- Health and hygiene awareness session for the school children along with dental camp at different schools (Primary (till Class V) and Junior High School (till Class VIII) with the provision of hygiene kit for the students of 12 schools
- A cleanliness drive where an awareness session on environmental cleanliness and its importance was highlighted. Approximately 150 participants including the local community and stakeholders were a part of this drive.

Establishment of Thalassemia Day-Care Unit at Bai Jerbai Wadia Hospital for Children

Bai Jerbai Wadia Hospital for Children is a 450-bedded multispecialty pediatric hospital that offers excellent quality care in all medical specialties to children from across economic strata of society. A sizeable number of children diagnosed with Thalassemia from Mumbai and all over Maharashtra visit various wards of Wadia Hospital for Blood transfusions. Additionally, every year 8-10 new cases of Thalassemia are diagnosed who are refused registration due to lack of adequate facilities. These children require separate and specialized care for rest of their lives. Activities undertaken are:

- Registration of children with major thalassemia
- Provide Leucodepleted blood transfusion to children living with major thalassemia on regular basis
- Post Leucodepleted blood transfusion follow-up with children living with major thalassemia
- Support group meeting with parents
- Recreational activities with children
- Recruitment and trained nursing staff for pre transplant followup with children suffering from oncology and haematology infections
- Infection control and management with pre transplant children suffering from oncology and haematology infections

Support to continued operations of EYE WAY Help Desk at the Victoria Memorial School for the Blind

Activities undertaken as part of the Project:

- Operationalization of the information helpdesk
- Training with Counsellors
- Monitoring and evaluation
- Promotional and awareness campaign

Interventions planned

- 2,796 visually impaired individuals reached out. It included around 822 visually impaired individuals assisted with information on govt schemes.
- 10 capacity building done for EyeWay helpdesk counsellors
- 8 promotional activities done for awareness of EyeWay help desk

Maternal, Newborn and Child Health Program - Building Bridges

In India, as in many other countries, public health systems are pyramidal in structure with several levels ranging from community health posts to tertiary hospitals. Proper ANC checkups and screening for complications is not being carried out rigorously in the primary level health centres and therein arises the need for emergency obstetric care. Weak referral systems can delay expectant mothers from seeking health care which can, in some cases affect the survival of both mother and baby.

In last three years the MNH program has established and strengthened structure referral linkages for streamlining the high-risk maternal referral process including Antenatal care provisions at Primary Health Centres. In order to continue endeavour to work with health system partnerships with 7 corporations of Mumbai Metropolitan Region - Thane Municipal Corporation (TMC), Kalyan-Dombivali Municipal Corporation (KDMC), Mira-Bhayandar Municipal Corporation (MBMC), Vasai-Virar Municipal Corporation (VVMC), Ulhasnagar Municipal Corporation (UMC), Brihan Mumbai Municipal Corporation (BMC) and Bhiwandi Nizampur Municipal Corporation (BNMC) were established on strengthening referral system.

Activities undertaken:

- Capacity building of program team
- Traning of MO/GNM/ANM (2 trainings in a year in 4 batches with each corproation)
- Training of ASHAs (2 half day trainings in a year in VVMC and TMC)
- Clinical Trainings with higher facility staff (Maternity& Peripheral Hospitals: 2 half day Trainings in a year in each corporation)
- Quarterly Health post events (Street plays, exhibition, godbharai)along with health talk
- Health talk/ANC clinic observations at the Health Post
- Health committee trainings
- Meetings with Action Groups
- Referral Meetings with facilities within the corporations & with other corporations

- Refresher trainings on referral documentation
- Appropriateness analysis

Balvatika

Balvatika is a pre-school where children of age group 2-5 years from slum areas get education and health services. As impacted by Covid-19, regular classes of the target age group children stopped however Balvatika team extended its services in slums through peer educators with small groups of children. Activities undertaken were:

- Conducting educational activities with slum community residing in five slums of BBN area.
- Encourage parents to educate their children
- Intellectual development of children through various activities.
- Stake holder engagement.
- Capacity building of staff
- Parents Teacher Meeting. (Through individual meetings and small groups)
- Linkages of Children with formal education.
- Conducting awareness activities on health and hygiene issues.
- Immunization of children and pregnant ladies through health department.

Case Study – 'Child Enrolled in Mainstream'

Laxmi, living in Manpura slum area since 2019 along with her parents and 2 siblings. She was not able to go to school due some family issues. Her parents were working as labor in factory and having very limited resources. After regular interactions with her parents, Balvatika team was able to convince the parents to enroll Laxmi in Balvatika center on 1st May 2019.

From the beginning, Laxmi was positive toward education and took high interest in studying. She started coming to Balvatika in Uniform regularly and enjoyed sitting in class and playing with other kids.

Laxmi completed her 5th year of age on 1st April 2020. Now she was ready to go to school but unlikely covid Pandemic came and the schools were close. Balvatika team was regularly in touch with her parents to keep them motivated to enroll Laxmi in school. In August 2020, Parents refused to enroll her in school due to Covid scenerio. Balvatika team met with Manpura School Head Master to know about the admission process during Covid times. Then Balvatika team met with parents and informed them that Laxmi can take admission in schools, and she does not need to go to school during covid and Govt. is providing classes online only. School will provide educational material & Ration. After several discussions, Laxmi's parents agreed to admit her in school. On 30th Aug. 2020, Laxmi was admitted in Govt. Primary School Manpura.

Laxmi is continuing her schooling and getting education happily. Balvatika team is happy to connect a girl with education which will further change her life.

Prevention of Non -Communicable diseases through lifestyle change at schools

Activities undertaken:

- Teacher Training by designated Arogya Trainer and provide materials for training, such as printed books, digital and other wherever possible
- Monitor and manage implementation of program by teachers in all selected schools

• Peer leaders to be trained to further to ensure implementation in schools/ communities

Interventions

- More than 4000 children were made aware of COVID appropriate behaviour, Balanced diet, Physical activity and risk factors for Indoor Air pollution
- Teachers from more than 75 schools (25 from each site) were trained

Project " Bhavan"- Construction of 2 Anganwadi Centers at Kallibillod village

- Construction of new Anganwadi buildings at two locations i.e Bhojpuri Colony and Jeevan Jyoti Colony as per the ICDS standard guidelines
- Teaching and Learning Materials and other stuffs support to Anganwadi Centres
- Ensuring water facility: Coordination will be done with GP/NP & ensure water availability in the identified Anganwadi centres
- Sabla Kit for Adolescents: To promote better personal health & hygiene practices and adolescent Rights, project will provide them Sabla Kits with the support from Women and Child Development Dept.

<u>Creches, communities and caregivers: Multi-pronged actions for promoting growth and</u> <u>development of tribal children from southern Rajasthan through Basic Health Centre</u> (BHS)

The tribal families in southern Rajasthan face several constraints. They have limited knowledge of childcare and nutrition and face a severe scarcity of nutritious food. Mothers are overworked, have little time for their children, and it is also difficult and time taking to cook food using firewood on the single burner that their homes have. In absence of the primary caregiver to take care of children, often the elder siblings are given responsibilities to take care of their younger siblings.

Phulwari, a mini-aanganwadi, are a model to address these issues of providing care and nutritious meal to children from 6 month to 5 years of age. The Phulwari team will also work with the mothers and the community to provide education on childcare and nutrition.

Activities undertaken:

- Provide childcare and nutritious hot cooked meals for young children through the phulwaris
- Training of phulwari workers
- Growth monitoring of young children in households
- Developing parents groups in the phulwaris
- Meetings with community and parents of enrolled children
- Home visits of families with young children
- Parents meetings on child health, care seeking for illnesses
- Linkages of young children with high-quality health services
- Quarterly anthropometry of children in the Phulwari.

Interventions

- 13 phulwaris provide services in remote communities in southern Rajasthan
- 26 Phulwari workers trained in childcare and nutrition
- 274 children were benefited under 13 phulwaries.
- 6 number of training conducted with Phulwari workers.
- 1 Social audit to be conducted in the communities to assess impact of following aspects under this project:
- 80 % of Parents of young children oriented to childcare and infant and young child feeding practices
- 50% of Malnourished children receive community based care.

Support to Kurkumbh, Daund and surrounding area Schools for Sanitization kits

Upon reopening of schools post-COVID, the government advised Schools to manage sanitation and COVID-appropriate arrangements. Cipla provided School Sanitization kits to select schools in Daund district. Each kit contains:

- Hand Sanitizer 10 Ltr.
- Sanitizer dispensers with foot operated stand 2 Nos.
- Pulse oximeter 1 No.
- IR Thermometer 1 No.
- Sodium Hypochlorite Solution 10 Ltr.
- Disinfectant sprayer 1 No.

Key impacts of the Programme

Cipla Foundation's community health initiatives are diverse and are targeted to address a variety of healthcare issues, thereby, addressing key gaps in the system. It includes general interventions such as awareness campaign, support to schools and anganwadis, and nutritional support, following specialized programmes have a significant impact on healthcare services:

- Initiative against viral hepatitis
- Mother Child Bridging Bridges Programme
- Mobile Health Unit

Impact of initiative against viral hepatitis

During FY 2020-21, as a part of the training and capacity building a total of 1,516 healthcare professional were trained on management of viral hepatitis. Training of primary care physicians has helped in enhancing accessibility and availability of standardized treatment at the primary care level. Early diagnosis and care provided by the trained physicians results in reducing morbidity and mortality due to viral hepatitis.

Mother and Child Bridging the Bridges Programme

Development of emergency obstetric referral algorithm has provided standardized objective criteria for referral. It helps clinicians in better decision making. Several studies have provided evidence that a robust referral system has following impact on reproductive child health outcomes³⁵:

- Lower still births
- Prevention of birth asphyxia
- Reduction in requirement of Neonatal Intensive Care Units (NICU) admissions
- Avoidance of unnecessary Caesarean sections
- Reduction cases of post-partum hameorhage
- Reduction in post-partum sepsis
- Reduction in maternal and infant deaths

Mobile Health Units

Accessibility to healthcare services: MHUs provide OPD services in difficult to reach areas. MHUs sites re selected carefully and are located 8-10 km from nearest public healthcare facility. Thus, accessibility to healthcare is enhanced.

Increase in health seeking behaviour: Due to availability of services at door-steps, many such patients availed healthcare services who would not otherwise have availed these services due to inaccessibility and costs involved. MHUs helped in increasing health seeking behaviour of the community.

Early diagnosis and prompt treatment of non-communicable diseases: MHUs provide screening of blood pressure for all patients. It has helped in early diagnosis of hypertension and early initiation of treatment. This would reduce probability of chronic complications due to hypertension. Furthermore, targeted investigations have also resulted in early diagnosis and initiation of treatment of diabetes mellitus.

Treatment compliance: During interviews with beneficiaries, several beneficiaries conveyed that had they not been provided free-of-cost medicines, they would have discontinued treatment of chronic diseases such as hypertension and diabetes. Such compliance also helps in reducing burden of chronic complications of these diseases.

Saving on out-of-pocket expenditure on healthcare: MHUs provide cost saving on three accounts – cost of availing services and consumables, cost of commutation, and saving on daily wages. Assuming average cumulative cost saved to be INR 100 per patient per visit, an estimated INR 75 lacs of out-of-pocket expense on healthcare has been saved.

Conclusion: Scalability and Sustainability

The three specialized programmes discussed above have easy scalability. Training modules and content on viral hepatitis has been standardized. Sharing it with peer-institutes and

³⁵ Hussein, J., Kanguru, L., Astin, M., & Munjanja, S. (2012). The effectiveness of emergency obstetric referral interventions in developing country settings: a systematic review. *PLoS medicine*, *9*(7), e1001264.

mobilization of like-minded organizations can help in scaling up training and capacity building of primary care physicians and nurses on management of viral hepatitis.

Furthermore, referral algorithm for obstetric emergencies can be adopted by other institutes and centres and larger studies to assess effectiveness can be conducted to improvise the tool if needed. Adoption of this tool at state and national level can strengthen current obstetric referral system which will help in improving current state of maternal and child health (MCH) significantly.

The Government of India has also piloted mobile medical unit programmes. A few NGOs are also implementing MHUs in several parts of the country. MHUs need CAPEX and OPEX, hence, continued funding is needed to support such programmes.

Conclusion

The program for community health and doorstep health supported by CF with collaboration with the implementation partners have led to improvement in the health care facilities of the local communities by availability of basic infrastructure, and related healthcare indices and metrics. The program was very well structured and efficiently executed by the implementation partner.

COVID-19 Response

Introduction

The COVID-19 disease caused by the novel Coronavirus (SARS-CoV-2) was first reported in Wuhan, Hubei Province, China in 2019 rapidly spreading with a large number of cases and deaths across the globe. The outbreak was declared a Public Health Emergency of International Concern by the World Health Organisation (WHO) on January 30, 2020³⁶. On February 11, 2020, WHO recognised and declared the new Coronavirus disease as COVID-19. The rapid spread across the world prompted the World Health Organisation (WHO) to declare the outbreak a pandemic on March 11, 2020.

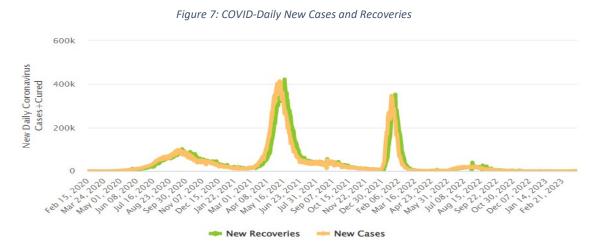
Coronavirus belongs to a family of viruses that normally circulate among animals, including camels, cats, bats, etc. In rare cases, these evolve and infect humans thereby causing humanto-human transmission. Previous examples of such infections are outbreaks of Severe Acute Respiratory Syndrome (SARS, 2003) and Middle East Respiratory Syndrome (MERS, 2014). SARS-CoV-2, is closely related to the SARS-Coronavirus³⁷. In humans, the transmission of SARS-CoV-2 occurs through respiratory secretions (directly through tiny droplets from coughing or sneezing, or indirectly through contaminated objects or surfaces)³⁸.

³⁶ <u>https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)</u>

³⁷ Jones KE, Patel N, Levy M, et al. Global trends in emerging infectious diseases. Nature 2008; 451:990-94.

³⁸ <u>https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions</u>

In India, the first three cases of COVID-19 were reported in the first week of February 2020, from Thrissur, Kerala. The initial trajectory of the outbreak was flat; however, it gradually took a steep course by mid of March 2020. The Government of India adopted a calibrated approach to managing the pandemic. Initially, interventions like IEC, behavioural change, thermal screening, isolation, etc., were adopted. In the vent of the steep rise in cases, a nationwide lockdown was enforced in March 2020. In the first wave, a peak of around 1,00,000 cases per day was reported. Considering the decline in the positivity rate and the number of cases, lockdown restrictions were gradually relaxed.



The second wave of COVID hit India in February-March 2021 and continued till May-June 2021. The second wave was more severe in terms of incidence rate, case positivity rate, and fatality. The second wave peaked with over 4,00,000 cases per day. Cases again started rising in December 2021 and the third wave lasted till February 2022. Due to the vaccination coverage, the severity of the third wave was relatively lower. More than four crore cases and five lac deaths have been reported due to COVID-19 disease³⁹.

COVID-19 was not just a healthcare issue, it involved larger socio-economic aspects. Major challenges faced during the pandemic were related to healthcare infrastructure, availability of effective masks, vaccine delivery, economic support, etc. Effective handling of COVID needed a collaborative approach from the government, non-governmental organizations, and the private sector. A multi-pronged approach comprising medical and non-medical interventions was adopted.

Details of interventions

Cipla's COVID-19 support initiative targeted addressing the challenges faced during the pandemic. It not only included activities concerning healthcare infrastructure support but also interventions for providing nutritional and entrepreneurial support. Activities undertaken are summarized below:

³⁹ https://www.worldometers.info/coronavirus/country/india/

Areas of Interventions	Challenges	Initiatives by Cipla
Case finding and diagnosis	 Availability of diagnostic kits Accessibility to diagnostic facilities 	 Procurement of diagnostic kits – RTPCR and Rapid Antigen
Management of COVID- 19	 Accessibility to healthcare services Availability of hospital beds Medical equipment Oxygen availability Availability of monitors and ventilators Availability of drugs and other consumables such as masks, gloves, and PPE Kits 	 Support in setting up isolation wards and Intensive Care Units Providing medical equipment to Primary Health Centres (PHCs), Community Health Centres (CHCs), and Civil Hospitals Provision of PPE gears for healthcare resources Provision of ventilators Provision of oxygen concentrators
Prevention of COVID	 Understanding about COVID-19 disease and pandemic Availability of effective masks Vaccine availability and delivery PPE kits for community workers Sanitization kits 	 Building awareness and knowledge about the COVID-19 pandemic among healthcare workforce Distribution of multi-layered washable facemasks with anti-microbial properties Support for Covid Care Material to local Grampanchayats, Covid Care Centres, Local Administration Provision of COVID Care consumables to ASHA and Anganwadi workers Support in vaccination drive – procurement and logistics Community mobilization for COVID Vaccines
Socio-economic aspects	 Nutritional support to healthcare workers Nutritional support to vulnerable groups Entrepreneurial support for income generation Continuing pre-school and school education 	 Provision of nutritious meals to frontline workers Support to Anganwadi children & Teachers with the provision of digital learning contents Provision of essential grocery to marginalized sections of society Support to families affected by COVID and Children who lost parents due to COVID Learning support for specially abled children
Research and Development	 Development of cost- effective technology for mask manufacturing 	Project SAANS - technology development for cost- effective mask

The annual spent of the above highlighted project for the period FY 2020-21 was INR 7.15 crores and FY 2021-22 was INR 15.48 crores.

Relevance of the program

During the period spanning from 2020 to 2022, the COVID-19 pandemic strained healthcare infrastructure, disrupted economic activities, and affected social resilience. Management of the pandemic needed urgent support at several levels including healthcare institutions, local community, and research institutions.

In the initial phases of the pandemic, due to a lack of effective treatment and vaccines against the disease, testing, tracing, and isolation were the mainstay of management. Due to the paucity of testing kits, COVID-19 testing was relatively low in India. During the early first wave, the testing rate in India was close to 10.5 per million population compared to close to 6,000

per million population in other developed countries⁴⁰. Studies and mathematical models provide evidence that higher testing had helped in containing the rate of spread of the COVID-19 disease⁴¹. Cipla's support in the procurement and logistical management of COVID-19 testing kits contributed to increasing the testing rate.

When the pandemic hit, India has approximately 0.5 hospital beds per 1,000 population against the global average of 2.9 beds per 1,000 population⁴². Furthermore, there were only 0.07 ICU beds per 1,000 population and 0.036 ventilators per 1,000 population⁴³. As per projections, India needed approximately 2.8 times the available hospital beds to manage COVID-19 during the peak stage⁴⁴. Cipla supported healthcare institutions at various levels with hospital beds, ventilators, ICU beds, and other consumables which were critically needed to bridge gaps in healthcare infrastructure during the pandemic.

Wearing face masks is one of the most effective measures against respiratory infections. As per a study conducted in South Asia, Indians were 0.36 times less likely to wear masks⁴⁵. One of the factors behind low adherence is the cost of the mask and its availability. Cipla partnered with CSIR for development of technology for manufacturing low-cost multi-layer face masks which were cost-effective substitutes of existing N-95 masks. Furthermore, with help of several self-help groups, production of such masks were scaled-up to increase supply.

During the peak of second wave, India faced acute oxygen shortage⁴⁶. Oxygen was one of the mainstay of supportive treatment during COVID. Use of industrial oxygen was positively correlated with cases of mucormycosis⁴⁷. In this context, portable oxygen concentrators provide cost-effective solutions in low-resource settings⁴⁸. Cipla's initiative of distribution of oxygen concentrators helped in managing patients in non-ICU setups.

Healthcare and community health workers were at the forefront of the war against the pandemic. It was crucial to ensure their well-being. The WHO recommends the following to ensure the well-being of healthcare workers⁴⁹:

- Protect HCWs from violence
- Improve HCW mental health
- Protect HCWs from physical and biological hazards
- Advance national programs for HCW safety, and
- Connect HCW safety policies to existing patient safety policies

42 https://data.worldbank.org/indicator/SH.MED.BEDS.ZS

⁴⁰ Tabish, S. A. (2020). COVID-19 Pandemic: The crisis and the longer-term perspectives. Journal of Cardiology & Current Research, 13(2), 41-44.

⁴¹ Cui, Y., Ni, S. & Shen, S. A network-based model to explore the role of testing in the epidemiological control of the COVID-19 pandemic. *BMC Infect Dis* **21**, 58 (2021). https://doi.org/10.1186/s12879-020-05750-9

⁴³ Kapoor, G., Hauck, S., Sriram, A., Joshi, J., Schueller, E., Frost, I., ... & Nandi, A. (2020). State-wise estimates of current hospital beds, intensive care unit (ICU) beds and ventilators in India: Are we prepared for a surge in COVID-19 hospitalizations?. *MedRxiv*, 2020-06.

⁴⁵ Abid, K., Imran, A., Bari, Y., Ziadi, T., Khambati, Z., Younus, M., ... & Jabbar, A. (2020). Adherence of facemask during COVID pandemic among South Asian countries-An observational study.

⁴⁶ Sindwani, G., & Suri, A. (2022). Acute hospital oxygen shortage during COVID-19 pandemic surge: how can we prevent the apocalypse?. *Brazilian Journal of Anesthesiology*, *72*, 311-312.

⁴⁷ Bhatia, M. (2022). The rise of mucormycosis in Covid-19 patients in India. *Expert review of anti-infective therapy*, 20(2), 137-138.

⁴⁸ Nowadly, C. D., Portillo, D. J., Davis, M. L., Hood, R. L., & De Lorenzo, R. A. (2022). The use of portable oxygen concentrators in low-resource settings: a systematic review. Prehospital and Disaster Medicine, 1-8.

⁴⁹ <u>https://www.who.int/news/item/17-09-2020-keep-health-workers-safe-to-keep-patients-safe-who</u>

Cipla took several initiatives for ensuring the well-being of healthcare workers. These included the distribution of PPE kits to protect them from biological hazards and the provision of nutritious meals to ensure physical and mental well-being.

The COVID-19 pandemic was not only a healthcare crisis. Due to the lockdown economic activity suffered significantly. It warranted support for vulnerable and marginalized communities. Distribution of rations and essential groceries to migrant workers and vulnerable communities was undertaken to support them in times of crisis. Furthermore, school education suffered substantially. Cipla's digital learning programme helped in continuing school and pre-school education in targeted geographies.

After the development of the vaccine, it was considered as the single most effective measure to prevent the occurrence and severity of COVID-19 disease. India launched its vaccination drive in January 2021, however, due to challenges such as cost implications, supply-side challenges, logistical issues, and vaccine hesitancy coverage was inadequate in the first six months⁵⁰. Cipla's support in the procurement and supply of vaccines helped in solving supply-side challenges. Furthermore, community mobilization and IEC activities to tackle vaccine hesitancy helped in addressing demand-side challenges.

Coherence with the National COVID Management Plan and Strategies

The Government of India adopted dynamic strategies to manage COVID-19 pandemic. During different stages different strategies were adopted:

- Containment, testing, tracing, isolation
- Strengthening healthcare infrastructure
- Increase in ICU and ventilator beds
- Community initiatives to enhance adherence to masks and PPEs (as needed)
- Boosting oxygen supply
- Increase vaccine penetration
- Social support to vulnerable and marginalized communities

Cipla's initiatives for support during COVID-19 were aligned with the national strategies to manage the pandemic. These were also aligned with globally recommended evidence-based solutions.

Effectiveness of the Program

Cipla's initiatives under COVID-19 support were broad-based and targeted at addressing several gaps in the management of the pandemic. Some of the key metrics are outlined below:

Enhanced Surveillance and Testing

Cipla's support in the procurement and supply of RT-PCR kits and Rapid Antigen Kits helped in augmenting surveillance and testing. During 2020-21, free-of-cost RT-PCR COVID-19 tests were supported for patients with financial difficulties across Maharashtra. More than

⁵⁰ Choudhary, O. P., Choudhary, P., & Singh, I. (2021). India's COVID-19 vaccination drive: key challenges and resolutions. *The Lancet Infectious Diseases*, 21(11), 1483-1484.

1,15,000 tests have been conducted across 26 government and civic hospitals in 17 municipal corporations during FY 2020-21 as against the one lac tests targeted.

Improved Healthcare Infrastructure

During peaks of the first and second waves, healthcare infrastructure was critically strained. Key supports provided by Cipla during FY 2021-22 were:

- 500+ Oximeters/IR thermometers were provided
- 100+ Oxygen concentrators/Ventilators/Enrichers were provided
- 50,000+ Rapid Antigen Kits were provided
- 11,000+ facemasks/PPE kits/disposal gowns and gloves were provided

Effective Vaccine Delivery

Cipla supported the procurement and supply of 1,00,000 Vaccine dosage in FY 2021-22. COVID vaccine not only lowers the likelihood individual infections but also helps in achieving herd immunity. As per various estimates, COVID-19 vaccine has approximately 80% efficacy⁵¹. Extrapolating the number of vaccine dosages supplied for two dosages and with 80% efficacy, Cipla's vaccine support programmes resulted in preventing new COVID-19 infections and Deaths.

Partnerships and Collaboration

Cipla's COVID support programme was implemented with help of several non-governmental organisations and self-help groups. It helped in building an ecosystem of COVID support to bring economies of scale and scope. It also enabled participating organizations to leverage complementary capabilities and deliver respective services more effectively.

Increasing Affordability of Masks

Under Project SAANS, technology for low-cost, multi-layer masks with anti-microbial properties was developed. This indigenous solution helped in manufacturing effective masks at approximately 1/10th of the cost of manufacturing with prevailing technology. During 2019-20, prices of N-95 masks increased by 250% and ranged between INR 95 to INR 165⁵². With the help of the new technology, more than 50,000 masks were manufactured, and prices of masks with equivalent efficacy were INR 20-40.

Social Support

Other supports included the promotion of entrepreneurship, supply of groceries, support to COVID-affected families and children, and learning support. Cipla supported establishing mask manufacturing setups. It was done in collaboration with other NGOs and self-help groups. This activity helped in income generation of approximately INR 6,000 per person per month for nearly 150 families. It also helped in increasing supply of effective masks at a lower cost as discussed above.

⁵¹ https://www.who.int/news-room/feature-stories/detail/vaccine-efficacy-effectiveness-and-

 $protection \#: \sim: text = This\% 20 means\% 20 that\% 20\% E2\% 80\% 93\% 20 out\% 20 of, group\% 20 versus\% 20 the\% 20 placebo\% 20 group. The second s$

 $^{^{52}} https://timesofindia.indiatimes.com/india/n95-mask-prices-rise-250-in-4-months-but-no-cap-yet/articleshow/76292726.cms$

Impact of the program

Under the Covid-19 response program, Cipla's social support helped in preventing affected families from slipping into extreme poverty, however, several other interventions supported by government and NOGs helped in this cause. The provision of rapid testing and hygiene kits as supported in augmentation of testing across the country. Furthermore, Cipla's support to PHCs, CHCs, and Sub-district hospitals helped in accelerating COVID preparedness at grassroot levels. It helped in improving accessibility to COVID care in remote places.

Conclusion

The COVID-19 pandemic was one of the most disastrous crises that had affected humankind over the last hundred years. The scale and severity of the outbreak warranted immediate, concerted, and dynamic management strategies. Cipla's COVID support activities were dictated by the needs of the community, scientific evidence, and the call of the government. These initiatives also paved a way for the future readiness for the similar circumstances.

Promoting Quality Education

Introduction

Education builds the foundation of a better world, it is a dynamic process of acquiring knowledge and gaining confidence, respect, skills, and values. The impact of education is seen on one's mental, social and emotional growth, thereby, fostering a culture of economic prosperity and social harmony. In the times of knowledge driven economies, the provision of quality education is not only limited to primary schooling, but extends to skills-based learning, awareness development, extra-curricular activities, multiple learning resources to encourage more holistic growth.

The need of supportive infrastructure, safety awareness, inclusive environment and holistic learning for education upliftment is identified by Cipla Foundation as one of the key thrust areas. Good school infrastructure promotes quality education delivery with greater impact in various aspects.

S.No.	Implementation Partner	Key Project
1.	Society for the Care of the Blind	 Provision of sports teachers Provision of teacher to support computer literacy Promoting participation of visually impaired students in sports competitions Facilitating regular computer classes
2.	Himalayan Social Institute (HSI)	 Promoting overall Early Childhood Care and Development (ECCD) of underprivileged children in psychological, educational, physical, cognitive, language, emotional and social aspects.

S.No.	Implementation Partner	Key Project
		 Holistic support provided for integral development and learning, thus improving Foundational Literacy and Numeracy (FLN). Supporting children in early years of learning to brace them for formal education. Improving attendance rate of students in schools Facilitate mid-day meals for health improvement in children Provision of staff training for early childhood care Creating awareness in community regarding health, education, and Integrated Child Development Services (ICDS) schemes
3.	Victory India National Organisation (VINO)	 Advocacy and coordination with local stakeholders regarding road safety awareness sessions Increase sensitivity about road safety and traffic rules in the community through rallies, sessions, awareness camps, exhibitions, etc. Identification of accident-prone areas and display sign boards in high-risk areas Escalating the need of maintenance of poor-quality roads to concerned department
4.	Self-Implemented Cipla Foundation	 Increasing sensitivity in government aided schools through awareness sessions and cultural activities like drawing competition regarding importance of overall safety in house, school, road, and environment Provision of Infrastructure support like benches, desks, boards, and renovation support as well to schools to promote quality education.
5.	Bookworm Trust Library in School	 Provision of virtual library experience to children and community Facilitating library experience in the schools lacking the resource by providing books with the program for lending and borrowing books Promote overall school reading culture through well-rounded learning approach and facilitating lively education experience for students. Improving reading skills and learning of students through read-aloud and structured teaching practices
6.	Peepul (Absolute Return for Kids)	 Promote quality education through teachers' trainings and capacity building programme for government teachers

S.No.	Implementation Partner	Key Project
7.	Bhartiya Bahuuddeshiya Khadi	 Design modules to train teachers on classroom management, English & Hindi reading Promoting effectiveness of programme through regular visits and follow up sessions Facilitating virtual knowledge sharing platforms for teachers Curating resources for teachers to ensure continuous knowledge transfer Renovating school complex to provide better
	Gramodyog (BBKG) Shikshan Sanstha	infrastructure support to rural and migrant students
8.	Ummeed Child Development Center	 Creating awareness in all stakeholders (teachers, parents, students and school leadership) regarding inclusivity and accepting of children with diverse needs Training of teachers regarding mental health & well-being, online teaching, effective communication, learning disabilities, ADHD Increasing effectiveness of the programme by follow up connections with teachers and heads of schools
9.	Educo	 Provision of social and emotional learning programme for students Facilitating counselling sessions for children to address their personal behavioural, emotional, and social concerns arising in context of the pandemic Sensitized teachers regarding the impact of mental health in students' overall performance Facilitating teachers' trainings to integrate the psychosocial and emotional learning skills in their remote teaching-learning lessons
10.	SETHU Child Development &Family Guidance Centre	 Promote inclusive education for ICDS beneficiary and strengthen Early Childhood Care and Development (ECCD) Regular training sessions for Anganwadi teachers for increased awareness regarding the children with special needs and creating an impact in their lives.
11.	Agaysta International Foundation	 Support towards set-up of Mobile Science Labs and mini-science centres (STEM labs) in

The annual spent of the above highlighted project for the reporting period was INR 1.75 crores.

Relevance of the programme

A positive school environment and infrastructure plays a major role in supporting a child's education and inculcate their interest in learning. As mandated by Central Board of Secondary Education (CBSE), the following basic facilities should be available under strict norms in a school to get affiliation:

- 1. Classroom
- 2. Science laboratory
- 3. Library
- 4. Computer laboratory
- 5. Mathematics laboratory
- 6. Room for extracurricular activities
- 7. Drinking water, toilets, and other physical activities
- 8. Facilities in accordance with Rights of the Person with Disabilities

In India, nearly 78% ⁵³of schools still don't have internet access and more than 61% of them do not have computers. In these developing times, there are 17% of schools which do not have any access to electricity. Libraries are a crucial source of information for students, which foster reading habit and nurtures cognitive thinking. The implementation and functioning gap of libraries in school is broad, as 84.1% schools in India are equipped with libraries, but only 69.4% of them have any books. For promoting inclusive education, it is important to make students with disabilities feels supported through the schools' infrastructure, however, more than 30% of the schools still needs ramps. Cipla Foundation's initiatives are addressing these challenges through their impactful projects which promote quality education and strengthen school infrastructure, which aids in fostering a child's growth.

Coherence of the programme

National Education Policy (NEP) ⁵⁴ of India emphasise on infrastructure which promotes learningfriendly environment. NEP also recognised the influence of inadequate infrastructure on increased dropout rates among students, with focus on providing sufficient and effective infrastructure students have access to safe and engaging school education at all levels from pre-primary school through Grade 12. All the efforts are aligned towards addressing gaps in infrastructure and commitment of 100% Gross Enrolment Ratio (GER) by 2030 from the Foundational Stage through Grade 12 for all children.

Similarly, Sarva ⁵⁵Shiksha Abhiyan (SSA) is Government of India's flagship programme which is coherent with Universalization of Elementary Education (UEE) programme. The scheme supports with new schools in those habitations which do not have schooling facilities and specifically helps in strengthening infrastructure of schools. Additionally, training and capacity building programs for educators through teaching-learning materials which strengthen the academic support structure at a cluster, block, and district level.

Furthermore, India is critically aiming to ensure inclusive and equitable quality education to promote lifelong learning opportunities in alignment with United Nations Sustainable Development Goal 4 -

⁵³ http://timesofindia.indiatimes.com/articleshow/83973459.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

⁵⁴ NEP EN Revised.pdf (education.gov.in)

⁵⁵ <u>Sarva Shiksha Abhiyan | Government of India, All India Council for Technical Education (aicte-india.org)</u>

Quality Education⁵⁶. The Cipla Foundation's initiatives are in alignment with national policies and programmes.

Effectiveness Of programme

Effective library support

• Bookworm Trust Library in School

The project had created an impact on multiple fronts, where interventions were focused to increase exposure of students with books, libraries and inculcate reading habits in them. A total of 68 schools were supported in libraries' activities and impacted 3648 students.

During the reporting period of FY 2020-21, the virtual story time, which focussed on delivering story content with local dialectical influences had nearly 34,281 viewers on social media platforms, and 3,328 students and 239 teachers were provided the content. The 'Book Box' initiative (*home/school delivery of books in boxes to communities*) aided in reaching out to nearly 68 schools and community, resulting in benefitting nearly 3,400 children. Furthermore, 8 webinars with participation by 136 teachers were conducted focusing of interactive read alouds, reading circle discussions, teacher training, parent support sessions and professional development offering.

The impact on teachers was clearly reflected by their updated teaching patterns that was influenced by their learnings from webinars, whereas the Book Box impacted in the creation of a culture of learning and sharing of stories at home as parents' engagement also increased with improved performance of their concerned child. The school-visits provided ground report of the acceptance of reading culture among students and teachers.

Effective support to students with special needs

• Society for the Care of the Blind

2 Sports coaches *(one male and one female)* and one computer faculty were provided to visually impaired students in Chandigarh. All the students that appeared in the final examination of respective subjects passed and promoted, with a 100% passing rate. Total 82 students from computer education and 51 students from physical education were benefitted from the initiative.

• Ummeed Child Development Center

An immersive two-year experience program was identified 'Inclusion Champions', wherein, enrolment was in different under-resourced schools within the city of Mumbai. Cipla Foundation's funding covers the pre-fellowship activities of two out of the three partner schools. A total of 27 beneficiaries were trained an acquired knowledge and information about the various topics covered in the training sessions, with a 80% attendance rate of teachers in fellowship schools during the training sessions.

During the reporting year FY 2020-21, the school outreach team conducted 28 workshops with 850+ beneficiaries for sensitizing and building the skills of teachers and other staff at schools for children with diverse needs. The interventions created a deep impact by building more supportive environment for children and encouraged them to be more inclusive in education.

Effective delivery of promoting quality education

⁵⁶ SDG Goal 4: Quality Education - UNICEF DATA

• Himalayan Social Institute (HSI)

HSI supported in the implementation of Bal Vatika, a pre-school initiative for the kids of age group 3-6 years for learning in play way method. Total 5 centres has been established which impacted 422 children (153 In Balvatika and 269 school going) children, which resulted in psychological, educational, physical and social development of them. The Bal Vatika's inculcated the habit in children of regularly attending them. The intervention resulted in improved literacy rate and health status of children in the area. The engagement and impact aligned with the Millennium Development Goals.

The program resulted in children's parent becoming more serious and aware about the importance of health and education, and completion of immunization.

• SETHU Child Development & Family Guidance Centre

Child Development Teachers (CDTs) were hired to acquire skills and practice assessment of children, interaction with parents, administration of screening checklists to confirm common disorders like Autism, Attention Deficit Hyperactivity Disorder (ADHD), Learning difficulties and language delays. Mukhya Sevikas were trained to train teachers regarding inclusive and supportive education.

Total 2 CDTs were hired, and they assessed 40 families to understand child's development levels. The major challenge was the outbreak of covid that hindered the implementation of intervention.

The initial diagnosis and dedicated teacher training provided multifaceted support to the concerned child in their education.

• Agaysta International Foundation

The Mobile science labs and mini-science centres (STEM labs) is a unique interactive learning program, which aids in increased access of hands-on science education to economically backward children in government and government-aided schools, across Maharashtra, Madhya Pradesh, Sikkim, and Karnataka. This will further aid in augmenting their education system with an exposure towards experiential science learning, under the guidance of trained-instructors. The program has helped in reaching out nearly 68,000 students digitally through video calls and live online sessions covering 113 schools across 8 districts.

Effective teachers' training & pupils support

• Peepul (Absolute Return for Kids)

A cohort of teachers from 30 partnered schools has been successfully trained on the three training modules - Classroom management, Hindi reading, and English reading. 3-day module trainings with a small batch ensured effective delivery and learning. The program benefited in training 225 government schoolteachers, and orienting principals of the partnered schools.

Educo

During Covid times students' learning patterns and methods shifted widely and that raised a demand of Psychosocial support for both students and educators. The multifaceted challenges included pandemic's general worry, stress and grief and forced quarantine into the house has deprived students from care and attachment that comes with interactions in the physical school environment. Educo org provided informational and supportive Social & Emotional Learning (SEL) Sessions to students and trainings & resources to teachers as well.

To reduce inequities in learning environments, CF supported infrastructure upgradation in Government aided schools near Cipla manufacturing locations by setting up of sanitation blocks, computer labs and libraries. Additionally, CF has provided e-learning equipment, desks, benches and grade-relevant books to enhance learning outcomes. During the reporting period, the infrastructure support benefitted 2,500+ students.

Ensuring Road Safety

The growing demand of mobility is supported by different modes of transportation through different types of modes and vehicles. Road safety is a rising concern due to lack of responsibility of drivers & pedestrians, negligence of safety rules & ill-condition of roads. Most of the crashes and accidents are preventable if road safety rules are followed obediently. Cipla Foundation is working with community to create awareness about safety rules and ensure safe and sound commute. Under the 'Sampuran Sadak Suraksha' programme total 10 Highway's activities were organized with the support of Traffic Police of Baddi & Barotiwala. The programme widened its purpose post-covid, when it was necessary to manage the crowd and maintain the protocols of social distancing, two security personnel were deployed to support administration and community as well.

The outreach of the purpose of safety increased through Safety Week Celebration in schools near Patalganga where safety awareness sessions and drawing competition with school children were organized. Employee volunteers were engaged in distribution of kits (drawing kits, stationery kits, drawing papers), supervising and assisting children during the drawing exercise. Total 1,748 students participated in the activities from 27 schools regarding overall safety in house, school, road, and environment.

Sustainability

Education is an important parameter for assessing development of any country. India is on its way to become one of the largest economies, so development becomes critically dependent on education. In past few decades, quality of education in India has improved through implementation of various schemes and reforms. However, the current situation demands even more extensive efforts and reforms to uplift infrastructure. Due to dynamic nature of process of dissemination of education, education delivery modes need to be diversified, hence, dedicated initiatives regarding digital infrastructure support are necessary part of curriculum.

Contribution from private sector is going to be key in resolving the existing problems in education sectors as seen from the work done by Cipla Foundation. A collaborative effort of private sector and government has enormous scaling potential to alleviate the current scenario of education in India.

Impact of the program

The various programs supported by Cipla Foundation for promoting quality education has significantly supported in providing access to education to the children of the nation, and reduction of inequalities in learning environment by supporting in provision of necessary infrastructure.

Conclusion

All the projects of Cipla Foundation under their thrust area of 'Education' and strengthening school infrastructure clearly delivered the intended impact. The programs were very well structured and efficiently executed by both Cipla Foundation and implementation partner.

Case Study - Pratham Mumbai Education Initiative=

Pratham works in the slum community of Ketkipada Nagar 4, Dahisar since 2020 and impact children and parents through various interventions. Sheetal Patil is one such parent who is one of the stakeholders in our intervention activities. Though Sheetal has been part of Pratham since January 2021 but there are many significant changes which can been noticed only in the recent months. Sheetal is a mother to 2, a son of 4 years and a girl of 9 years. Her husband works in a private company which makes the condition precarious. Sheetal is also not much educated and therefore, unable to support her family. But she desires is to make her children study well. While she ensures that both her children go to school regularly, she also makes sure they are part of Pratham education activities that are implemented in the community. She would regularly connect with the Pratham team member in the community to observe progress of her children. Noticing a sense of responsibility in her, the Pratham team member decided to involve her as a SMART Mother in the parent engagement program. Sheetal agreed to this. She now exclaims that she has developed a lot of confidence after Pratham re-started its work in the month of December". After becoming a 'Smart mother' for her community, she carries out all her responsibilities diligently and has also send these activities to her friends. Gradually, now her friends have also started liking the activities and carry out the same with their children regularly. This created a network to carry out the program smoothly and now they guide other mothers as well.

E-Learning

Introduction

Through Cipla Foundation, the Company focuses on 'Education' as one of the key thrust areas by unlocking opportunities and creating access to education through digital learning solutions, thereby, promoting e-learning. In the D-LEAD (Digital Learning Excellence and Development) program executed by the Cipla Foundation, there is dedicated focus on creating continuous access to education through digital tablets with a pre-loaded curriculum in English and other regional languages to rural students across various geographies, namely, Maharashtra (Patalganga, Kurkumbh), Sikkim, Himachal Pradesh (Baddi), Madhya Pradesh Pithampur/Indore, Goa, and Karnataka (Virgonagar, Bommasandra). Cipla Foundation and ConveGenius Edu Solutions Pvt Ltd, come together to implement the Digital transformation of schools to further the learning outcomes and education levels in the state of Himachal Pradesh. This program enabled state machinery and other stakeholders to better serve their students by accessing actionable data insights and furthering state goals towards education and betterment.

Cipla Foundation in collaboration with iDream Social EdTech Foundation (*hereafter referred as iDream*), an education technology company based out of Gurugram, and Convegenius provided support to rural students and teachers with provision of iDream digital learning contents with accessories such as power banks, trainings, telephonic support, monitoring, and reporting access to teachers and stakeholders. iDream's major solution offerings include iPrep Digital Library, iPrep PAL, iPrep Digital Class, and iPrep Tablets. The main activity of the program includes:

- 1. Tablet Readiness
- 2. Digital Learning Content
- 3. Accessories and Power Banks
- 4. Trainings
- 5. Telephone Support
- 6. Monitoring and Reporting
- 7. Whatsapp-based weekly assessment

S.No.	Activities	Sub-Activities	
1	Tablet Readiness	 Pre-loading all content in the tablets Installation of learning and reporting platform Tablet testing for content readiness , report capturing, and making them ready to use 	
2	Digital Learning Content	 Installation of iDream digital learning contents of 9th and 10th Standard (English and Marathi) with LMS in all Tabs Installation of iDream coach app in Teachers Tabs Installation of mobile device management (MDM) in all Tabs 	
3	Accessories and Power Banks	 Provision of accessories to Students and Teachers Provision of Power Banks 	
4	Trainings	On-ground training for Teachers and Students	
5	Telephone Support	Provision of dedicated phone number of project support team to beneficiaries	
6	Monitoring and Reporting	 Provision of online reporting dashboard and quarterly usage report Provision of monthly/quarterly monitoring and tablets usage report 	

Details of intervention

The annual spent of the above highlighted project for the reporting period was INR 1.26 crores.

Relevance of the program

According to World Economic Forum (WEF), COVID-19 had resulted in closure of schools across the world. More than 1.2 billion children, globally, have been out of the classroom, resulting in a dramatic change in education with an accelerating rise of e-learning, whereby teaching is undertaken remotely and on digital platforms.⁵⁷ Nationally, the education sector in India changed substantially in the wake of the on-going COVID-19 pandemic, resulting in school closures and inequities in digital learning. Many students, primarily from the rural areas did not receive much or any online learning material due to poor internet connectivity and lack of access to digital devices. According to a survey, it was identified that 42 percent (%) of students ranging from age 6 to 13 years did not use any type of remote learning during school closures.⁵⁸

Many students faced challenges of not having access to personal devices, poor internet connectivity, lack of finances for an internet subscription, schools not sending materials or difficulty in grasping the online curriculum.⁵⁹ Alternative modes of education and schooling were crucial for continuing education of children. The availability of digital infrastructure and equipment was essential to enhance access in the endeavour. Cipla Foundation's initiative to support school children with provision of digital content tablets and requisite trainings was relevant to the needs of the targeted beneficiaries during Covid times to ensure access to school education and it will continue to add value by augmenting digital learning platforms.

Coherence of the program

⁵⁷ The rise of online learning during the COVID-19 pandemic | World Economic Forum (weforum.org)

⁵⁸ "Repeated school closures due to Covid leading to learning loss in South Asia: UNICEF", The Indian Express, 10 September

^{2021,} https://indianexpress.com/article/education/repeated-school-closures-due-to-covid-19-leading-to-learning-loss-and-widening-inequities-in-south-asiaunicef-7499111/.

⁵⁹ Krishna N Das, "Reopen schools or disaster looms, experts tell Indian authorities", *Reuters*, 7 September 2021, <u>https://www.reuters.com/world/india/india-reports-31222-new-covid-19-cases-deaths-rise-by-290-2021-09-07/.</u>

The 'National Education Policy (NEP) of India identifies digital literacy as a critical life skill. It emphasises on integration of digital literacy and computational thinking for all the learners at the basic-level with hands-on assessments, with a focus on availability of digital infrastructure on ground. Leveraging internet for educational purposes and availability of adequate number of access devices (digital tablets or equivalents) can help in the endeavour of improving teaching and learning process. The integration of educational technology into the school curriculum will be aided by providing all students to have the access to connected personal devices by 2025.⁶⁰ According to the NEP, the school curriculum will promote digital literacy using such personal devices as well as available digital infrastructure (computer laboratories, tinkering laboratories, makerspaces, etc.)

The D-LEAD program of Cipla Foundation is coherent and aligned with the framework established in the NEP for usage of technology in education, thereby, providing improved teaching, learning and evaluation process in the technology driven era.

Effectiveness of the program

Tablet distribution

During the reporting period, a total of 5,573 tablets were distributed by iDream, Convegenius, and 17,000 Ft Foundation, to the beneficiaries as a part of the D-LEAD program across various geographies. Beneficiaries were from the government schools which helps in targeted coverage.

S.No.	Targeted Geographies	FY 2020 – 21	FY 2021 – 22
1	Maharashtra	491	1,641
2	Sikkim	18	435
3	Himachal Pradesh	330	623
4	Karnataka	252	500
5	Madhya Pradesh	335	510
6	Goa	238	200
	Total	1,664	3,909

Coverage of relevant content and curriculum

The tablets were pre-loaded with the learning material (audio and video textbooks) covering recommended curriculum for class 9th and class 10th. As per the usage analysis, active usage days ranged from 25 days to 29 days per month, which signifies, relevance of the content loaded in the tablets. Additionally, the regional language content of video lessons had maximum viewership, which outlines the importance of including regional language content.

Effectiveness of Trainings

Evidence of continuing usage of tablets and access of audio-visual content provides substantiation of effectiveness of trainings provided to teachers and students. Telephonic support also aided in ensuring high usage trends among the beneficiaries.

Impact of the program

Impact on continuous school education

During COVID-19 lockdown phase, provision of tablets ensured continuation of school education for the beneficiaries. Assuming on an average 200 days of schooling per year, tablet distribution programme helped in ensuring approximately 1,40,000 days of schooling for 5,573 students.

Impact on learning

⁶⁰ NEP EN Revised.pdf (education.gov.in)

As per the Monitoring & Evaluation assessment conducted by the partner organization, performance on practice questions suggested approximately 40-50% of students achieved 100% 'mastery'. It can be inferred that usage of digital content helped students in better learning.

Impact on digital literacy

Provision of digital infrastructure/equipment helps in enhancing aptitude regarding use of such equipment⁶¹. Access to digital equipment and content enables beneficiaries to access information easily which has a potential to contribute towards overall growth and development.

Scalability of the Programme

With revolution in digital technology, new ways of learning in addition to textbooks are evolving. Furthermore, several ed-tech products have proven to enhance learning and academic performance, therefore, there is a need for replicating this program at a larger scale.

Newer modes of digitisation such as smart classrooms having digital infrastructure such as internet, digital boards, etc., would enable teachers to provide quality education through demonstration and simulations, that would help in enhance learning. The Foundation has conceptualised 'Tab-Labs' program on these lines. Collaboration with other corporate foundations and government organisations can help in achieving a higher penetration of digital learning among students.

Conclusion

The D-LEAD program was able to deliver its intended objectives and benefits to the children from the marginalised community to ensure continuity of learning through leveraging digital literacy and digital infrastructure. The program was very well structured and efficiently executed by the implementation partner.

Vocational Training

Introduction

With an intent to empower the youth, differently-abled individuals, and economically-weaker sections of the society, Cipla Foundation (CF) has identified 'Skilling' as of the key focus areas for corporate social responsibility. It is a front-line runner in supporting and enhancing vocational initiatives, thereby, aligning its initiatives with the vision of Ministry of Skill Development and Entrepreneurship to unlock human capital to trigger a productivity dividend and bring aspirational employment and entrepreneurship pathways to all.

Cipla Foundation in a 50:50 partnership with Ambuja Cement Foundation (ACF) collaborated for supporting skill development and setting up of rehabilitation cum production centre/units for differently-abled, with an aim to provide skill-based training for rehabilitation and livelihood of the beneficiaries. Additionally, one of the key initiatives in partnership with Ambuja Cement Foundation was Skill and Entrepreneurship Development Institute (SEDI) at Nalagarh, Himachal Pradesh, where students were enrolled on various short-term courses.

Furthermore, in a unique collaboration with CSIR – Indian Institute of Chemical Technology (CSIR – IICT) during the pandemic, CF supported the designing of a low-cost, scientifically validated face masks during the COVID-19 pandemic. This project led to creating an access to affordable face masks for all the community members, thereby, creating livelihood opportunities for the community, and helping in combating the pandemic. The project operated under the name 'SAANS' (Breathe) mask and was operational across Maharashtra, Bihar, Himachal Pradesh, Gujarat and Pondicherry region in collaboration with its implementation partners.

⁶¹ Maity, S., Sahu, T. N., & Sen, N. (2021). Panoramic view of digital education in COVID-19: A new explored avenue. *Review of Education*, 9(2), 405-423.

Details of interventions

The main activities as a part of the program includes:

S.No.	Implementation Partner	Key Project	Sub-Activities
		 Ambuja Manovikas Kendra (AMK) 	 Raw material procurement for baking and, pottery products and artificial jewellery making Training and staff recruitment Outreach: Seminars/Workshops/Exposure Visits
1	1 Ambuja Cement Foundation	 Skill and Entrepreneurship Development Institute (SEDI) 	 Promotional activities (online and field level) Enrolment of trainees Practical sessions for trainees Online interaction and exposure with industries Training and certification of trainees Placement of trainees and follow-ups
2	Halo Medical Foundation HelpAge India	 Project 'SAANS' – Industrial Transfer 	 Set up of production centres Implementation of SAANS project through Self-Help Groups (SHGs)
3	CSIR - Indian Institute of Chemical Technology	• Project 'SAANS'	 Multi-layer face mask design and production Product evaluation, certification, and demonstration
4	Govt. Industrial Training Institute (ITI) Rangpo Sikkim	 Training of local educated unemployed youth for ITI courses 	 Sponsorship for one-year skill development

The annual spent of the above highlighted project for the reporting period was INR 0.39 crores.

Relevance of the program

The drivers for a nation's economic growth and social development are the skillset and knowledge of its people. Nations with higher levels and better standards of skills are resilient and possess the abilities to tackle global challenges, thereby, leverage the opportunities in domestic and international markets. As per the National Sample Survey Office (NSSO)'s 78th round report (2020-2021) on Status of Education and Vocational training in India, only 47.9% of people in the age group of 15-24 years, 34.9% of people in the age group of 15-29 years and 26.8% of people in the age group of 15-35 years have received formal vocational and non-formal vocational training.⁶²

India has been facing several challenges in the skilling and entrepreneurship space. The perception of the public that vocational or skilling is the last option for those who have not been able to succeed in formal education system, paucity of trainers, declining labour force participation rate of women, lack of assured wage premium for skilled people, pre-dominant non-farm, unorganized sector employment with low productivity but no premium for skilling, are a few challenges to be named.

^{62 &}lt;u>MultipleIndicatorSurveyinIndiaf</u> 0.pdf (mospi.gov.in)

CF's initiatives and programs for skilling and empowering the youth, differently-abled, and individuals from economically-weaker sections, has a high relevance with respect to addressing the challenges faced by the nation, thereby, contributing to the skill development initiative of India.

Coherence of the program

Ministry of Skill Development and Entrepreneurship (MSDE)⁶³ envisions to transition India at a high-skill equilibrium, thereby, helping in the creation of opportunities and livelihoods for the individuals, enterprises, and the national economy. This will aid in social mobility, creation of a skill market which is learner-centric and demand-driven, and facilitate aspirational employment and entrepreneurship.

National Policy for Skill Development and Entrepreneurship (NPSDE)⁶⁴ intends to link skill development to improve employability and productivity. It aims to make quality vocation training aspirational for both the individuals and the employer, wherein, employer acknowledges the productivity linked to skilled individuals by paying a requisite premium, and the individuals see it as an opportunity to grow and elevate their standard of living through earning livelihood. The policy also highlights the integration of skilling with formal education by introducing vocational training courses linked to the local economy, thereby, igniting student interest. The initiatives and projects under this program are in coherence with national priorities as highlighted in the National Policy for Skill Development and Entrepreneurship.

Effectiveness and impact of the program

Effective implementation of Project 'SAANS'

Amidst the covid pandemic, the Foundation, in collaboration with CSIR IICT, supported in the designing of low-cost, scientifically validated face masks.

During the reporting period of FY 2020-21, nearly 100+ Self-Help Group beneficiaries across five (5) NGO partners, namely, Ambuja Cement Foundation, Mandeshi Foundation, Halo Medical Foundation, Helpage India, Divya Disha, were trained by CSIR-IICT through interactive online sessions with live demonstration of mask-making technique over a total duration of 27 hours spread over 15 + sessions. These sessions included dissemination of information on mask design and layout, material procurement details, besides feedback and clarification of doubts. A total of 1,00,000 masks were manufactured by 100+ self-help group beneficiaries across various geographies under the project 'SAANS' which supported the women in earning their livelihood.

Case Study – Stitching up Excellence

The Covid-19 pandemic led to a devastating loss of human life and livelihoods across the globe. The outbreak of the pandemic changed the way we lived. Amidst other precautions, wearing facemasks became a necessity for health and safety. The Mandeshi Foundation took it upon itself to its social responsibility and reached out to women who lost their jobs owing to the pandemic and the lockdown. The organization started encouraging women to stitch masks and earn a living. Pamphlets and videos on the design, size, and stitching of masks and how to sanitize sewing machines and other equipment were prepared and circulated by the Mann Deshi team. The noble initiative and the professional manner in which it was being carried out, garnered support from CIPLA Foundation which developed a 4 layers mask in collaboration with CSIR-IICT.

'Urmila (beneficiary) was always fond of stitching work. She had four members in her family. As the financial situation of her house was weak during the pandemic, she started looking for work and came in touch with the Mann Deshi Foundation. She got the work of mask-stitching and this income helped her a lot with her household expenses. She continued the work of mask-making and sold around 9000 masks. Once the covid-

⁶³ About MSDE | Ministry of Skill Development and Entrepreneurship | Government Of India

⁶⁴ policy booklet.cdr (msde.gov.in)

19 situation normalized, she got the work of stitching kurtas for dhol-tasha players of the Swarup Vardhini group. Working on this project was a new experience for her. She was trained by Mandeshi in work finishing. This helped her in her own tailoring business as well. She also enjoyed working with other women in the textile unit. They got to make uniforms for doctors and nurses as well as bags made with jute and khan fabric. Working on a variety of orders gave her creative satisfaction and also boosted her confidence. '

Effective support to skill development and rehabilitation centre

CF in collaboration with Ambuja Cement Foundation, during the reporting period, trained 17 differently abled beneficiaries on various trades such as bakery, pottery, artificial jewellery making, and basic computer training. This further led the trainees to a livelihood for themselves, thereby, enhancing their standard of living. Furthermore, follow-ups were conducted to the rehabilitated trainees by their respective trainers for continuous support. Of the 40 graduated trainees, 27 are engaged in self-employment and are independently making various products for sale.

One of a beneficiary of SDRC (Artificial Jewellery) has won a Punjab State Award in 2020 in the category of "Best self-employed person with disability (Female)" in a public event. This marks as an epitome in the success of the program and its effectiveness.



"I was working as a laborer in companies before getting training from SEDI. After getting technically trained now I'm working as a Supervisor in a reputed company with decent salary and I can support my family financially. I'm thankful for SEDI for giving me this opportunity."

-Testimonial of a beneficiary

"SEDI is a place where everyone can learn a skill and can earn a sustainable livelihood. This training has helped me in becoming a helping hand to my family. I used to sew clothes with an old sewing machine later I bought a new sewing machine from my savings."

-Testimonial of a beneficiary

Effective training to unemployed youth

During the reporting period, CF supported in one-time grant for skill development training of 81 identified beneficiaries for ITI courses on topics such as mechanics, plumbing, electrician, and welding in partnership with Industrial Training Centre Mining. After the successful completion of the training, 13 beneficiaries were placed in reputed organisations which helped them earn a respected livelihood and contribute to the national economy.

Conclusion

The program for enhancing vocational skills, with an aim to empower individuals, supported by CF with collaboration with the implementation partners have led to improving employability, productivity, and inclusivity of specially-abled beneficiaries. The program was very well structured and efficiently executed by the implementation partner.

Research

Introduction

With an intent to contribute to public funded universities engaged in conducting research in science, technology, engineering, and medicine for promotion of Sustainable Development Goals (SDGs), Cipla Foundation has collaborated with Council of Scientific & Industrial Research – Central Drug Research Institute (CSIR-CDRI) for implementation of *'CSIR-CDRI Centre for Science Outreach and Research'* initiative. The project focused on creating and strengthening research work on "neglected diseases" as well as focus on motivating the youth towards scientific temperament and research acumen. It also emphasises on promoting basic research in various areas.

Details of the program

The main activities supporting as a part of the program includes:

- 1. Establishing research Lab for Science Outreach This includes online training of students via webplatform through webinars, classes, and assignments, establishment of lab for R&D, and training, specially during Covid.
- 2. Research support for Anti-Microbial Resistance (AMR) and Cancer
- 3. Centre for Rare Genetic Disorders This includes genome sequencing of Handigodu syndrome patients

The annual spent of the above highlighted project for the reporting period was INR 0.59 crores.

Relevance

Based on several operational research studies, it has been substantiated that an early exposure to science encourages students for choosing science, technology, engineering, or mathematics for higher education. This is further augmented by inclusion of experiences such as interaction with faculty, being part of research institutions and mentoring by academic advisers including financial support. With this intent, an outreach lab of CDRI, Cipla Foundation will aid in focused training of selected students/teachers in drug discovery which will help not only to create the future scientific leaders but will also provide the skilled human resource to cater the needs of country's pharmaceutical R & D setups.

One of the key elements of the Science, Technology, and Innovation (STI) Policy 2020⁶⁵ of India highlights on promoting the spread of scientific temper amongst all sections of the society. It also emphasizes on promoting excellence and relevance in research and development by nourishing and attracting talent to science and careers with research. The collaboration of Cipla Foundation and CSIR-CDRI is clearly in alignment with the STI Policy, thereby, being contributor to the policy vision to accelerate the pace of discovery and delivery of science-led solutions for sustainable and inclusive growth.

⁶⁵ https://dst.gov.in/sites/default/files/STIP Doc 1.4 Dec2020.pdf

With increasing burden of disease, and evolution of viruses, it is imperative to develop new molecules, for effective treatment of viral diseases, and complications. The intervention also aims to promote drug discovery, specifically of novel molecules, which addresses existing gaps in pharmaceutical research and development.

Key outcomes and results

Effective delivery of outreach webinars

During the implementation period, the outreach webinars and lectures were delivered to approximately 1,050 beneficiaries/individuals, contributing to nearly 480 person hours. The coverage of the webinars and lectures included topics such as Fundamental of Drug Discovery, Chemistry in Drug Discovery, and Metabolic Disorders: Indian Scenario and Indigenous Solutions. Outreach activities through the online lecturers were most impactful as it was participated by beneficiaries from remote places where access to resources and knowledge is limited. The webinars and outreach activities targeted students from wide-geography, including, rural districts of West Bengal, Uttar Pradesh, and Bihar, in addition to urban areas of Ahmedabad, Bhubaneshwar, and Delhi.

Effective delivery of training sessions

During the implementation period, two (2) training programs were conducted for the MS students at CSIR-CDRI-Centre for Science Outreach and Research and HNB Garhwal University through a four-day workshop and training webinar respectively. These sessions delivered by eminent experts have impacted approximately 190 participants, contributing to nearly 640 person-training hours. The theme of the sessions covered topics such as role of natural products in drug delivery, drug discovery, medicinal chemistry, wet lab practices in organic chemistry research, approaches for biological screening. In addition to the sessions, working examples and live experiment supported in boosting the scientific and research acumen of the participants.

Effective drug discovery

CDRI is in process of several research work keeping in mind the Public good and the support provided from Cipla Foundation has helped the institution to fast track the project.

Conclusion

The collaboration of Cipla Foundation and CSIR – CDRI was successfully aligned with the STI Policy 2020 of India through this outreach and research program, thereby promoting scientific excellence in research and development by encouraging the youth. CSR Rules as amended in 2019, provided for funding of R&D activities for promotion of research. Furthermore, research in novel drug discovery has potential of landmark breakthroughs, especially, for management of viral diseases and complications, caused by SARS-Cov-2 and other related viruses. The program was very well structured and efficiently executed by the implementation partner, thereby, achieving objectives effectively.

Scholarships

Rationale of the program

One of a key thrust areas of Cipla Foundation (CF) focuses on 'Education' by unlocking opportunities and creating access by providing digital infrastructure support and student scholarships. It believes in promoting quality education including support for primary education, career counselling, technology access, and scholarships as well. Cipla Foundation has been felicitating the meritorious students of Class X appearing in Board examination to reward their hard-work, thereby, motivating them and their peers through Merit Awards annually. Furthermore, CF in collaboration with Baddi University of Emerging Sciences and Technologies (BUEST), Himachal Pradesh, have supported the higher education of students from economically weaker sections of the society, who could not continue higher education due to financial constraints, and also aligning their education with livelihood.

The annual spent of the above highlighted project for the reporting period was INR 0.73 crores.

Key outcomes

Effective delivery of merit awards

With an intent of appreciation for the hard work of students, during the financial year 2020-21, a total of 282 students from more than 90 schools were provided scholarships. Students who achieved top three positions in the Board Examination of 10th standards were awarded with monetary merit award for INR 5,000, INR 4,000, and INR 3,000, respectively. The identified students were enrolled at Government, Government-aided, and Special Schools, in the vicinity of Cipla Limited at Baddi, Indore, Sikkim, Goa, Kurkumbh, Mumbai, Patalganga, and Bengaluru.

Location	No. of Students
Baddi	22
Bangalore	29
Goa	29
Indore	16
Kurkumbh	43
Mumbai	48
Patalganga	66
Sikkim	29
Total	282

Support to the students from financially weaker sections

During the reporting period, 41 students were supported to pursue a four-year degree in Bachelors in Science (B.Sc.) – Medical (Part-I and Part-II). The classes have been imparted at the Baddi University campus, online classes, and the Cipla factory premises, to provide and hands on experience to the students, thereby adding value to their learning experience. The students have also been provided with practical exposure at Cipla factory.

Conclusion

Provision of scholarships plays a vital role in fulling the dreams of students from weaker sections of the society, as it not only covers the cost of pursuing higher education, but changes the lives of students. An increase in the financial aid particularly, scholarships, and grants, have resulted in the increase in livelihood of such students⁶⁶. The partnership of Cipla Foundation and Baddi University and provision of scholarships to the students as Merit Awards, has acted as a catalyst in the lives of the students, thereby, encourage them to succeed in society. The program, in collaboration, with BUEST was very well structured and efficiently executed by the implementation partner, thereby, achieving objectives effectively.

⁶⁶ Moving Beyond Access, College Success for Low-Income, First-Generation Students – The Pell Institute - ED504448.pdf

Others – Disaster Relief

Introduction

One of the key thrust areas of Cipla Foundation, 'Disaster Response', intents to reach out to affected communities to provide immediate relief in case of any disasters. It also focusses on providing support in the form of Covid rehab programme as well as initiatives towards mitigation. Cipla Foundation has collaborated with various implementing agencies, namely, Helpage India, Liver Foundation, and Indo Global Social Service Society (IGSSS), with a prime focus on serving the community, to minimize the impact and provide resources due to the devastation that occurred due to the Amphan Cyclone in Bay of Bengal.

Super Cyclonic Storm Amphan was a powerful tropical cyclone, causing widespread damage over West Bengal. The destruction resulted in flooding of the low-lying areas, damage to many households, thereby displacing many lives. The project 'Immediate Relief Support towards Amphan Cyclone' focused on supporting affected families from Covid-19 pandemic, provision of community kitchen and food, and provision of dry ration.

Details of the program

The main activities undertaken as a part of the program includes the following, which is implemented by multiple implementation partners:

- 1. Protection against Covid-19 and other communicable diseases Indo Global Social Service Society
 - a. Procurement of material
 - b. Transportation
 - c. Support for distribution of hygiene kits
 - d. Monitoring and evaluation
- 2. Provision of dry ration Helpage India
 - a. Procurement of consumables
 - b. Transportation of consumables
 - c. Support for distribution of dry ration
 - d. Monitoring and evaluation
- 3. Support to community kitchen and food Liver Foundation
 - a. Procurement of consumables
 - b. Transportation of consumables
 - c. Supervision of community kitchen activities
 - d. Support for distribution of food to 1000 individual on daily basis through community members
 - e. Monitoring and evaluation

The National Policy on Disaster Management (NPDM) has a vision of building a safe and resilient India by developing a holistic, proactive, multi-disaster oriented and technology driven strategy through a culture of prevention, mitigation, preparedness and response.⁶⁷ One of the key objectives of the NPDM is to ensure efficient response and relief with a caring approach towards with needs of the vulnerable and affected sections of the society. ⁶⁸ The collaboration of Cipla Foundation and multiple implementing partners for disaster response

⁶⁷ National Policy on Disaster Management (NPDM) | National Portal of India

⁶⁸ Annexure-I (mha.gov.in)

is clearly in alignment with the NPDM, thereby, resonating with CF's mission of 'caring for life' for under-served communities through responding immediate cyclone relief work.

The annual spent of the above highlighted project for the reporting period was INR 0.31 crores.

Key outcome

Effective distribution of hygiene kits

During the financial year 2020-21, the hygiene kit comprising of washing powder, sanitary napkins, bath soap, plastic bucket with lid, aqua tab, and re-usable masks, were distributed to 500 families, in collaboration with IGSSS. The criteria for selection of beneficiaries focussed on most marginalised and vulnerable family with adolescent girls/women members, and women-headed families across Paraganas district, West Bengal.

Effective distribution of food

During the financial year 2020-21, a community kitchen was set up with the help of the local police and mid-day meal workers in one of the villages. The beneficiaries either came to the kitchen or were supplied food for their families through a mobile distribution van.

Nearly 795 people from 167 families came regularly to the community kitchen for meals for a period of one month. Additionally, mobile van regularly visited the affected hamlets, thereby, serving around 200-250 people regularly. This further resulted the beneficiaries to undertake the re-construction of village once the nutrition was ensured.

"One of the beneficiary families had lost their hut as the tree fell on it. That resulted in death of their younger son and a severe injury to their daughter. The family had taken the daughter to the rural hospital and so, the mother was engaged in caregiving at the hospital. The community kitchen helped the distressed family to get meals for one month. After the girl was discharged from the hospital, she also came to the community kitchen."

-Case Example of a beneficiary

Effective distribution of dry ration

During the financial year 2020-21, the bulk dry ration and hygiene items, consisting of rice, dal, cooking oil, salt, sugar, lifebuoy soaps, and masks, were distributed to 920 destitute elder self-help groups (ESHG). The distribution was completed by 37 village-level federation.

"Due to the Amphan cyclone, and Covid-19 pandemic, one of the beneficiary, an ESHG group member, aged 74 years, was identified by the Village-Level Federation, because of her poor economic condition. The beneficiary's only son lost his job during the covid-19 pandemic, and their crops were also destroyed due to the cyclone. At this moment, the beneficiary was provided with 6kg rice, 1kg Dal, 1liter cooking oil, 1kg salt, 1kg sugar, 4pcs bathing soap and 4pcs of mask. '*HelpAge and Cipla je sahajyo korechhe ta atulonio'* (*Work done by Cipla and Helpage in invaluable and unprecedented*) are the beneficiaries appreciation towards the support."

-Case Example by a beneficiary

Conclusion

India is vulnerable to various natural and man-made disasters. Because of dense population, impact of such disasters can be potentially grave, especially for those who are from the economically and socially weaker segments of the society. Within the vulnerable groups, elderly persons, women, children - especially women

rendered destitute, and children orphaned on account of disasters and the differently abled persons are exposed to higher risks. ⁶⁹

The collaboration of Cipla Foundation and multiple implementing partners, for the disaster response programs is aligned with CF's vision of 'Caring for life', thereby, respecting and protecting people from all walks of life, with focus on human dignity and protection. The program was very well structured and efficiently executed by the implementation partners, thereby, achieving objectives effectively.

Conclusion

The Cipla Foundation's efforts towards giving back to the society and empowering vulnerable communities through its CSR initiatives with focus on Healthcare, Education, Skilling, and Disaster Response has positively affected the healthcare infrastructure, vocational skills, and education infrastructure across various geographies of the country. The Foundation has impacted beneficiaries across 15+ states across 100+ towns and villages, in collaboration with more than 50 implementation partners. CF's association with implementation partners and NGOs helped in ensuring robust grassroot reach, with an intent of leaving no-one behind, thereby, contributing to the United Nations Sustainable Development Goals (SDGs).

In India, a majority of cancer patients are diagnosed with stage III or IV disease. In addition to patients with advanced-stage disease, patients with early-stage cancer also need psychosocial and nutritional support, symptom relief, and physiotherapy. Furthermore, during the initial phases of the pandemic, Cipla's efforts and support in the procurement and logistical management of COVID-19 testing kits augmented government's efforts towards vaccine and palliative support to the beneficiaries contributed to positively impact the healthcare infrastructure of the country.

As a way forward to reach the last mile beneficiary of the country, CF shall more focus on cooperative collaboration with other foundations and government and non-governmental organizations. This would aid in bringing effectiveness and efficiency through leveraging complementary competencies, with an intent of 'Caring for Life', thereby, positively impacting the society and communities.

⁶⁹ Annexure-I (mha.gov.in)